PHILIPS 25PT532B

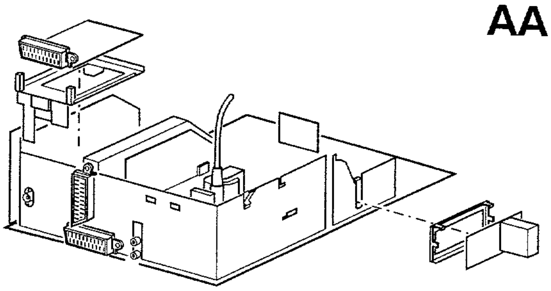
MODEL

SERVICE MANUAL

Colour television **Chassis**

GR 2.4
AA

Service
Service
Service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270694

Service Manual

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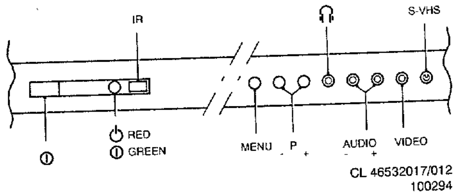
PCS 74 232 GB

PHILIPS

1. Technical specification

Mains voltag	:220 - 240 V (± 10%)
Mains frequency	:50 Hz (± 10%)
Aerial input impedance	:75Ω - coax
Minimum aerial voltage	:32μV
Maximum aerial voltage	:32mV
Pull-in range colour synchronization	:± 300Hz
Pull-in range horizontal synchronization	:± 300Hz

Local operation functions:



Programmes	: 0-89
VCR operation on programmes	: 0-89

Indications:

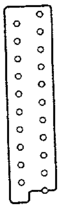
- On Screen Display (OSD)

- LED:
  - standby (red)
  - operation (green)
  - RC5 reception (flashing yellow)
  - I^2C bus fault in μP (flashing white)

2. Connection facilities

1. Specification of the terminal sockets

EXT1/EXT2



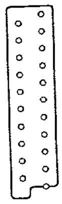
1	- Audio	⊙→	R (0,5VRMS 1kΩ)
2	- Audio	→⊙	R (0,2 - 2VRMS; 0,5 V_{nom}; ≥ 10kΩ)
3	- Audio	⊙→	L (0,5VRMS 1kΩ)
4	- Audio	⊥	
5	- Blue	⊥	
6	- Audio	→⊙	L (0,2 - 2VRMS; 0,5 V_{nom}; ≥ 10kΩ)
7	- Blue	→⊙	(0,7V_{pp}/75Ω)
8	- CVBS-Status (0-2V: int.; 9,5-12V: EXT-4/3; 4,5V-7,5V:EXT-16/9)		
9	- Green	⊥	
10	- -		
11	- Green	→⊙	(0,7V_{pp}; 75Ω)
12	- -		
13	- Red	⊥	
14	- -		
15	- Red /	→⊙	(0,7V_{pp}; 75Ω)
15	- C-SVHS	→⊙	(0,3V_{pp}; 75Ω)
16	- Status		(0-0,4V: FB-OFF;1-3V FB-ON; 75Ω)
17	- CVBS	⊙→	⊥
18	- CVBS	→⊙	⊥
19	- CVBS	⊙→	(1V_{pp}/75Ω)
20	- CVBS	→⊙	(1V_{pp}/75Ω){EXT1}
20	- CVBS/ Y-SVHS	→⊙	(1V_{pp}/75Ω){EXT2}
21	- Earth screen		

EXT4

1	- ⊥		
2	- ⊥		
3	- Y	→⊙	(1V_{pp}; 75Ω)
4	- C	→⊙	(1V_{pp}; 75Ω)

2x ⊙	CINCH Audio	→⊙	L+R (0,2-2VRMS; 0,5 V_{nom} ≥ 10kΩ)
1x ⊙	CINCH CVBS	→⊙	(1V_{pp}; 75Ω)

EXT3



1	- Audio	⊙→	R (0,5VRMS; 1kΩ)
2	- Audio	→⊙	R (0,2 - 2VRMS; 0,5 V_{nom}; ≥ 10kΩ)
3	- Audio	⊙→	L (0,5VRMS; 1kΩ)
4	- Audio	⊥	
5	- ⊥		
6	- Audio	→⊙	L (0,2 - 2VRMS; 0,5 V_{nom}; ≥ 10kΩ)
7	- -		
8	- CVBS status 3	⊙→	(0-2V: int.; 9,5-12V: ext.)
9	- ⊥		
10	- -		
11	- -		
12	- -		
13	- ⊥		
14	- ⊥		
15	- -		
16	- -		
17	- CVBS	⊙→	⊥
18	- CVBS	→⊙	⊥
19	- CVBS	⊙→	(1V_{pp}/75Ω)
20	- CVBS	→⊙	(1V_{pp}/75Ω)
21	- Earth screen		

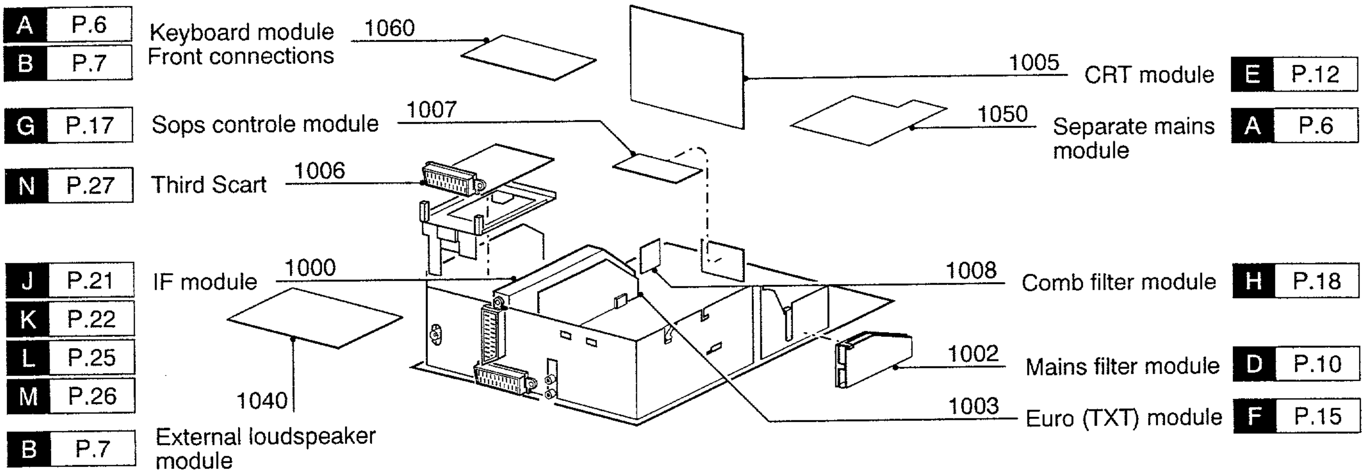
Audio out

2x ⊙ CINCH Audio ⊙→ L+R (0,5VRMS; 1kΩ)

Front

⊙ 3.5mm 🔈/🎧 8Ω

PWB location drawing


A P.6
B P.7
Keyboard module
Front connections
1060
G P.17
Sops controle module
1007
N P.27
Third Scart
1006
J P.21
K P.22
L P.25
M P.26
IF module
1000
1040
B P.7
External loudspeaker module
1005
CRT module
E P.12
1050
Separate mains module
A P.6
1008
Comb filter module
H P.18
1002
Mains filter module
D P.10
1003
Euro (TXT) module
F P.15

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3. Safety instructions, Maintenance instructions, Warnings and Notes

Safety Instructions for Repairs

1. Safety regulations require that during a repair:
    - the set should be connected to the mains via an isolating transformer
    - safety components, indicated by the symbol ⚠, should be replaced by components identical to the original ones P.12
    - when replacing the CRT, safety goggles must be worn. P.6

2. Safety regulations require also that after a repair:
    - the set should be returned in its original condition
    - the cabinet should be checked for defects to avoid touching, by the customer, of inner parts P.18
    - the insulation of the mains lead should be checked for external damage
    - the mains lead strain relief should be checked on its function P.10
    - the cableform and EHT cable are routed correctly and fixed with the mounted cable clamps in order to avoid touching of the CRT, hot components or heat sinks P.15
    - the electrical resistance between mains plug and the secondary side is checked. This check can be done as follows:
        - unplug the mains cord and connect a wire between the two pins of the mains plug
        - switch on the TV with the main switch
        - measure the resistance value between the pins of the mains plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 MΩ and 12 MΩ.
        - switch off the TV and remove the wire between the two pins of the mains plug
    - thermally loaded solder joints should be resoldered. This includes components like LOT, the line output transistor, fly-back capacitor.

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Maintenance Instructions

It is recommended to have a maintenance inspection carried out periodically by a qualified service employee. The interval depends on the usage conditions.

- When the set is used in a living room the recommended interval is 3 to 5 years. When the set is used in the kitchen or garage this interval is 1 year.
- During the maintenance inspection the above mentioned "safety instructions for repair" should be carried out. The power supply and deflection circuitry on the chassis, the CRT panel and the neck of the CRT should be cleaned.

Warnings

1. In order to prevent damage to IC's and transistors, all high-voltage flashovers must be avoided. In order to prevent damage to the picture tube, it should be discharged using the method shown in Fig.3.1. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is OV (after approx. 30s).

2. **ESD**

    All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten their life. Make sure that during repair you are connected by a pulse band with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential.

3. Be careful when taking measurements in the high-voltage section and on the picture tube.

4. Never replace modules or other components while the unit is switched on.

5. When making settings, use plastic rather than metal tools.
    This will prevent any short circuits and the danger of a circuit becoming unstable.

6. In order to prevent measuring errors, the heat sinks should not be used as reference points for measurements.
    The heat sink for the sound output amplifier (next to the channel selector) is connected to the -16 or -12 volts.

7. Together with the deflection unit and any multipole unit, the flat square picture tubes used form an integrated unit. The deflection and the multipole units are set optimally at the factory. Adjustment of this unit during repair is therefore not recommended.

8. The high-voltage cable in 21" units is glued in the line output transformer. This can therefore not be replaced.

Notes

1. The picture tube PCB has printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.

2. Blackline units can be recognized by the thick, protected high-voltage cable. Non-blackline units have a thin, unprotected high-voltage cable.

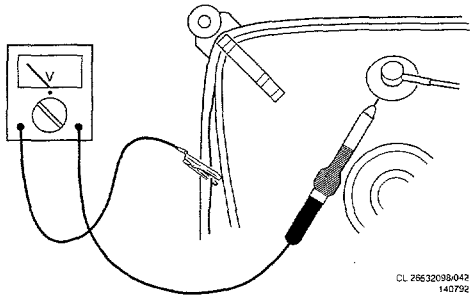


Fig. 3.1

4. Mechanical instructions

1. Removing the back plate

It is only possible to remove the back plate after removing the screws on the top, side, possibly on the underneath **and possibly above the EXT 2 connection**. In the case of subwoofer units, the subwoofer speaker on the carrier panel should also be unplugged (see Fig. 4.2a).

2. Service position 1

Service position for module service and to measure test points
Unlock the chassis after the cables of the degaussing coil and any PIP module have been disconnected, and pull it backwards until all test points are accessible (see Fig. 4.2b).
In order to make the tuner and the IF/sound module accessible, the bracket above these modules can be removed (see Fig. 4.3). With the exception of one fault message, the unit continues to function normally when the PIP module is not connected.

3. Service position 2

Service position for repair
Place the chassis on the heat sink on the tuner side after service position 1 is reached (see Fig. 4.4).
Or in case of FL4 cabinet there is a service hook where the chassis with bracket can be hanged on
(see fig. 4.1). Be careful with the wiring!!

Warning: make sure that the heat sink of the sound output amplifier does not form a short circuit with the raster/line heat sink if the bracket of the third scart has been removed !

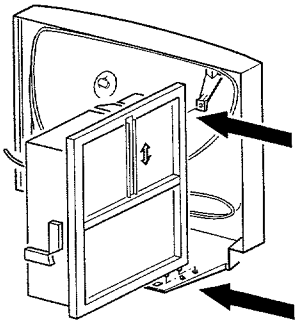


Fig. 4.1

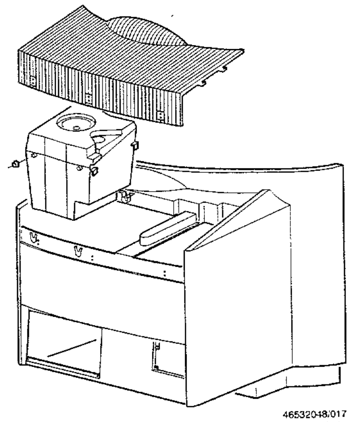


Fig. 4.2a

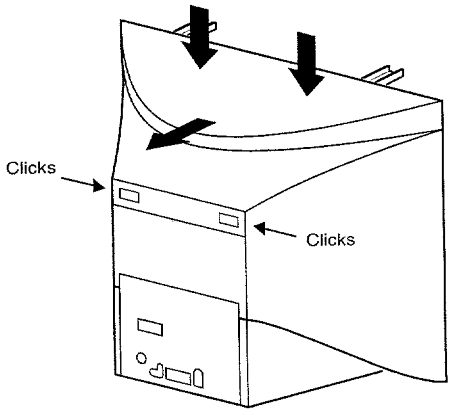


Fig. 4.2b

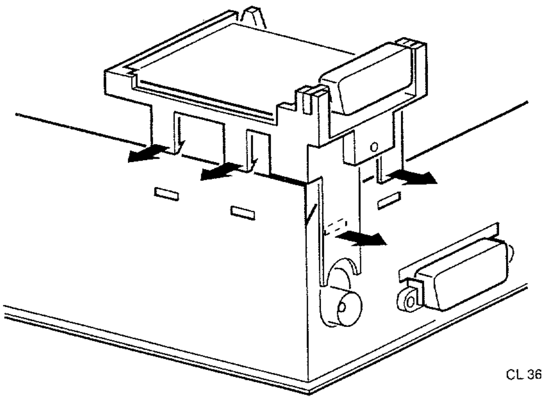


Fig. 4.3

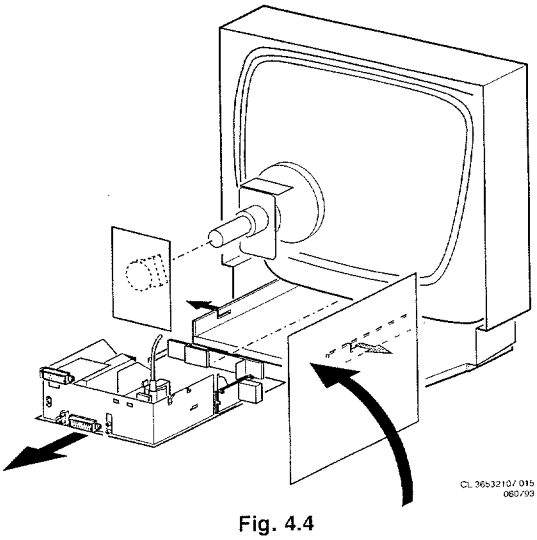
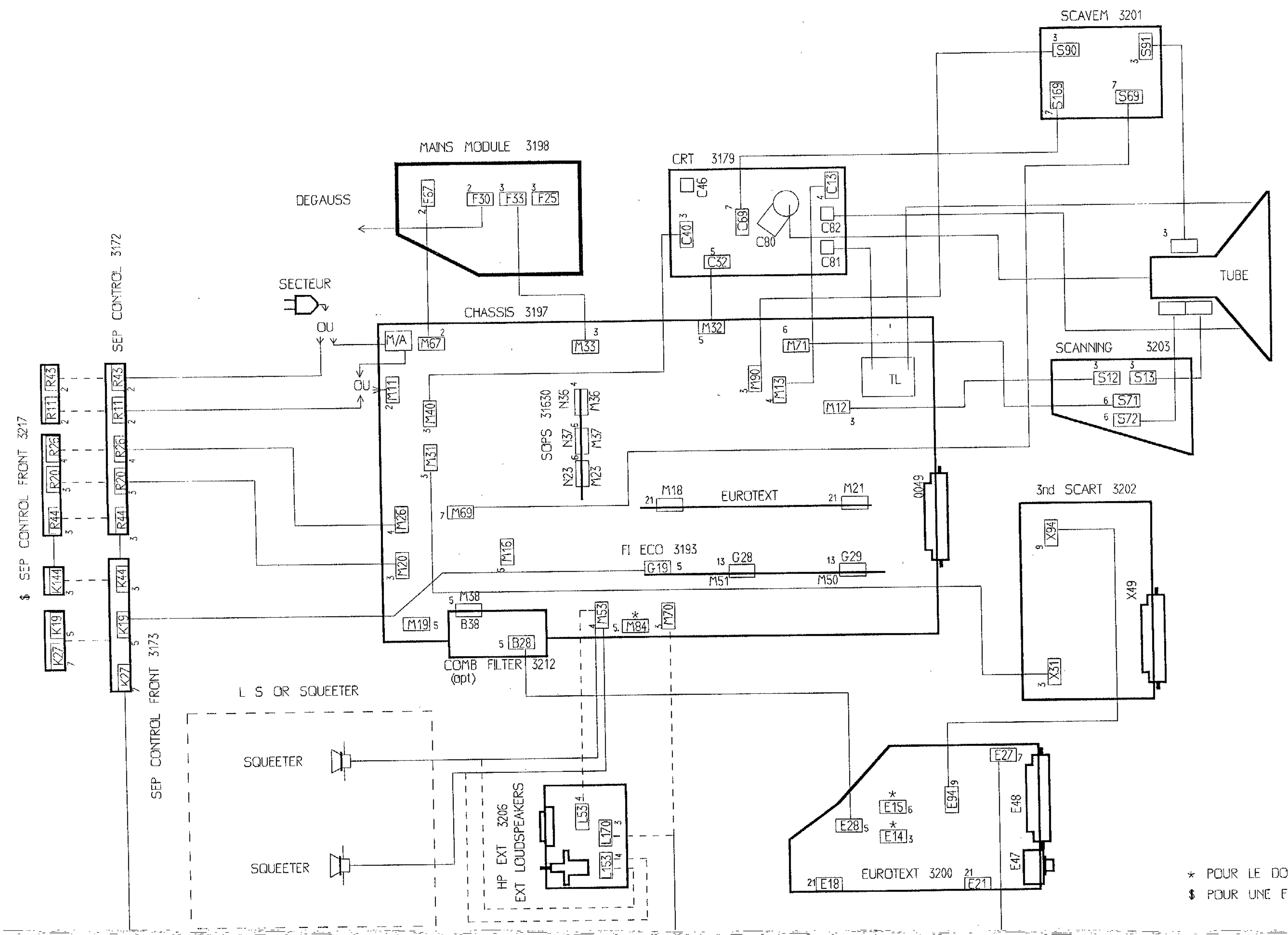


Fig. 4.4

Wiring diagram/Verdrahtungsschema/Schéma de câblage


SCAVEM 3201
S90
S91
S169
S69
MAINS MODULE 3198
E57
F30
F33
F25
DEGAUSS
CRT 3179
C46
C13
C69
C82
C80
C40
C32
C81
TUBE
SECTEUR
OU
CHASSIS 3197
M/A
M67
M33
M32
M71
M90
M13
M12
TL
SCANNING 3203
S12
S13
S71
S72
SEP CONTROL 3172
R43
R11
R26
R20
R44
FRONT 3217
SEP CONTROL
K144
K19
K27
K44
SEP CONTROL FRONT 3173
M11
M40
M31
M26
M20
M69
M16
SOPS 31630
N36
M36
N37
M37
N23
M23
M18
EUROTEXT
M21
0049
FI ECO 3193
G19
G28
G29
M51
M50
M38
B38
M19
B28
COMB FILTER 3212
(opt)
M53
M84
M70
3nd SCART 3202
X94
X49
X31
L S OR SQUEETER
SQUEETER
SQUEETER
HP EXT 3206
EXT LOUDSPEAKERS
L53
L170
L53
EUROTEXT 3200
E27
E48
E47
E15
E14
E94
E28
E18
E21

* POUR LE DOLBY

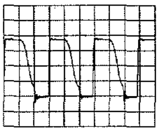
$ POUR UNE ESTHETIQUE 29" (379)

Oscillograms/Oszillogramme/Oscillogrammes

TP1 = DC 15V9

TP2 = DC -15V9

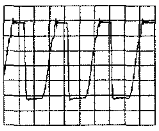
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

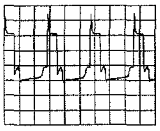


5V/div AC
5µs div

TP6 = DC 4V8

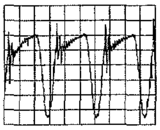
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



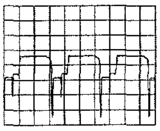
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

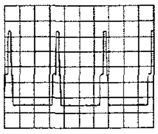
TP12 = DC 2V7

TP14



2V/div AC
20µs div

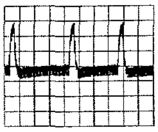
TP16



2V/div AC
20µs div

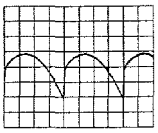
TP17 = DC 0V

TP18



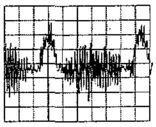
2V/div AC
5ms div

TP19



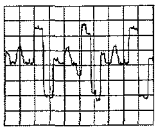
1V/div AC
5ms div

TP20



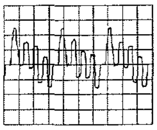
20mV/div AC
10µs div

TP21



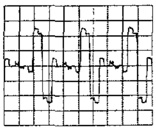
0.1V/div AC
20µs div

TP22



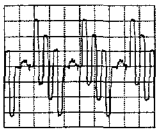
0.2V/div AC
20µs div

TP23



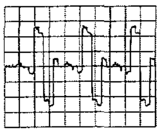
0.2V/div AC
20µs div

TP24



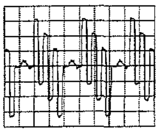
0.2V/div AC
20µs div

TP25



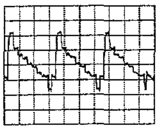
0.2V/div AC
20µs div

TP26



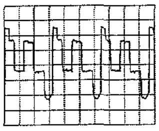
0.2V/div AC
20µs div

TP27



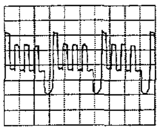
0.1V/div AC
20µs div

TP28



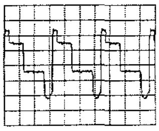
0.5V/div AC
20µs div

TP29



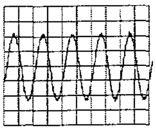
0.5V/div AC
20µs div

TP30



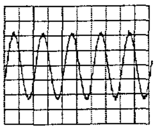
0.5V/div AC
20µs div

TP31



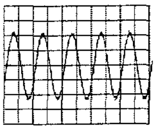
10mV/div AC
0.5ms div

TP32



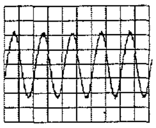
10mV/div AC
0.5ms div

TP33



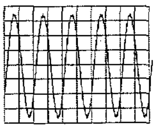
10mV/div AC
0.5ms div

TP34



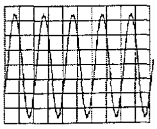
10mV/div AC
0.5ms div

TP35



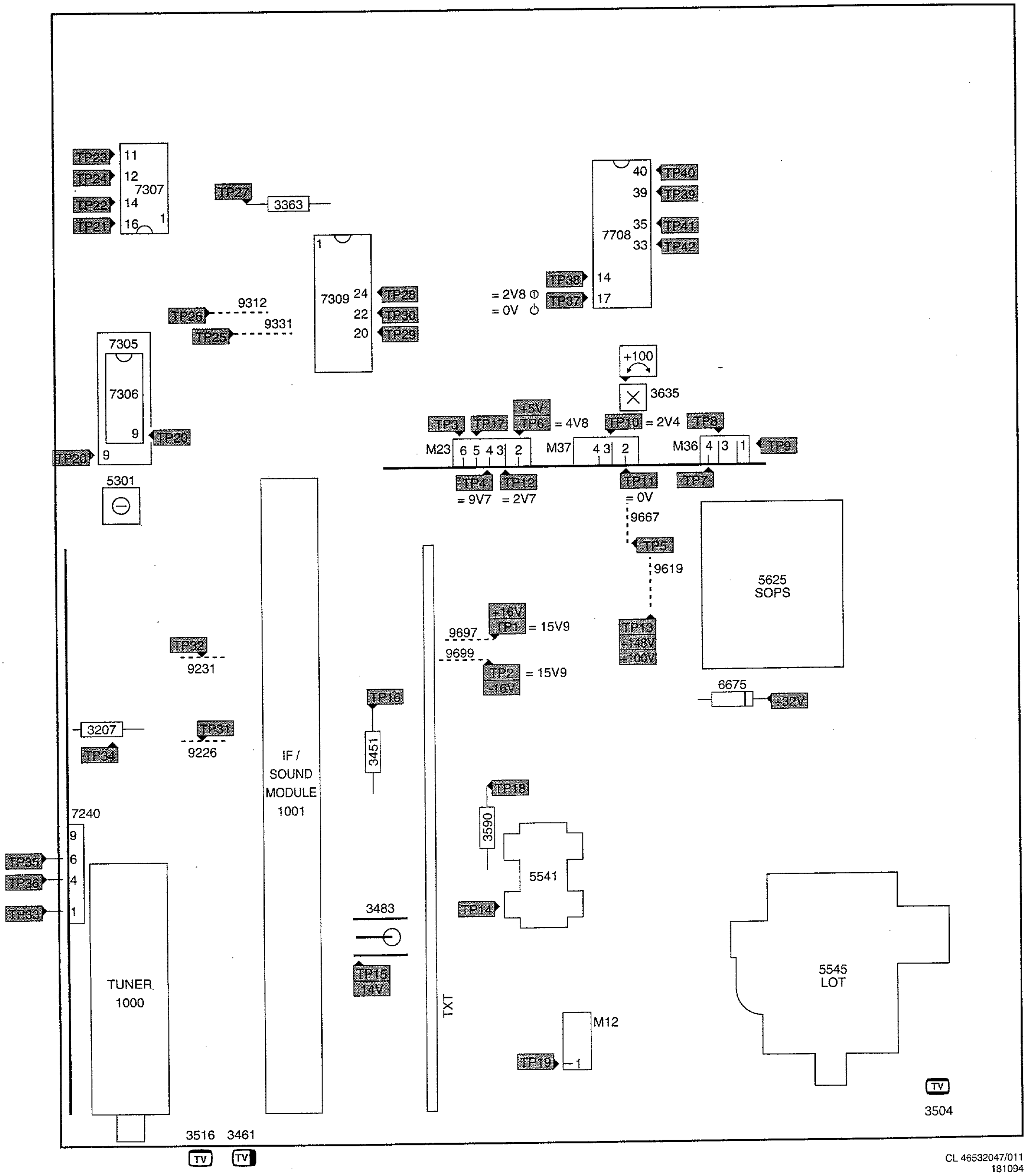
200mV/div AC
0.5ms div

TP36



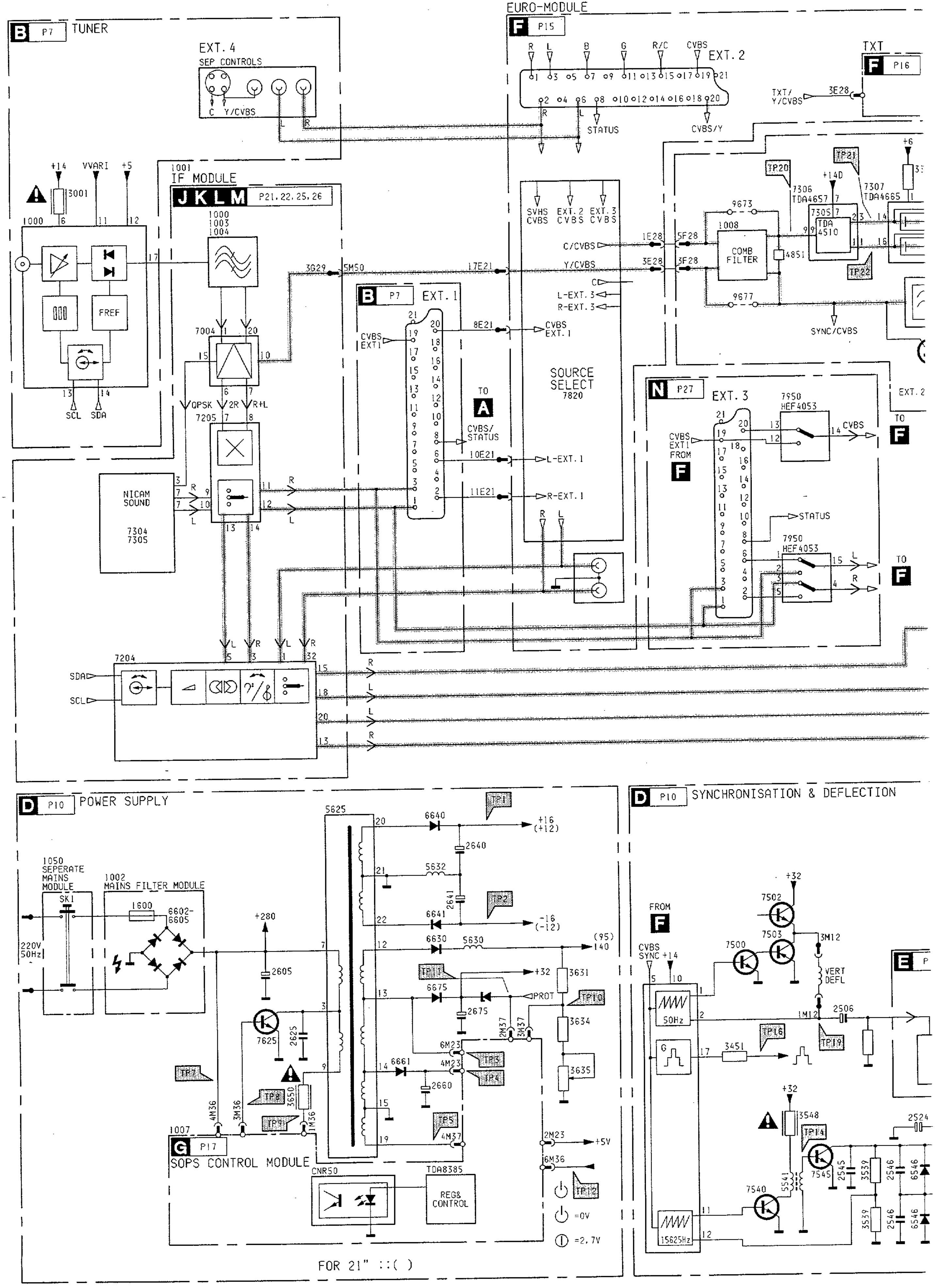
200mV/div AC
0.5ms div

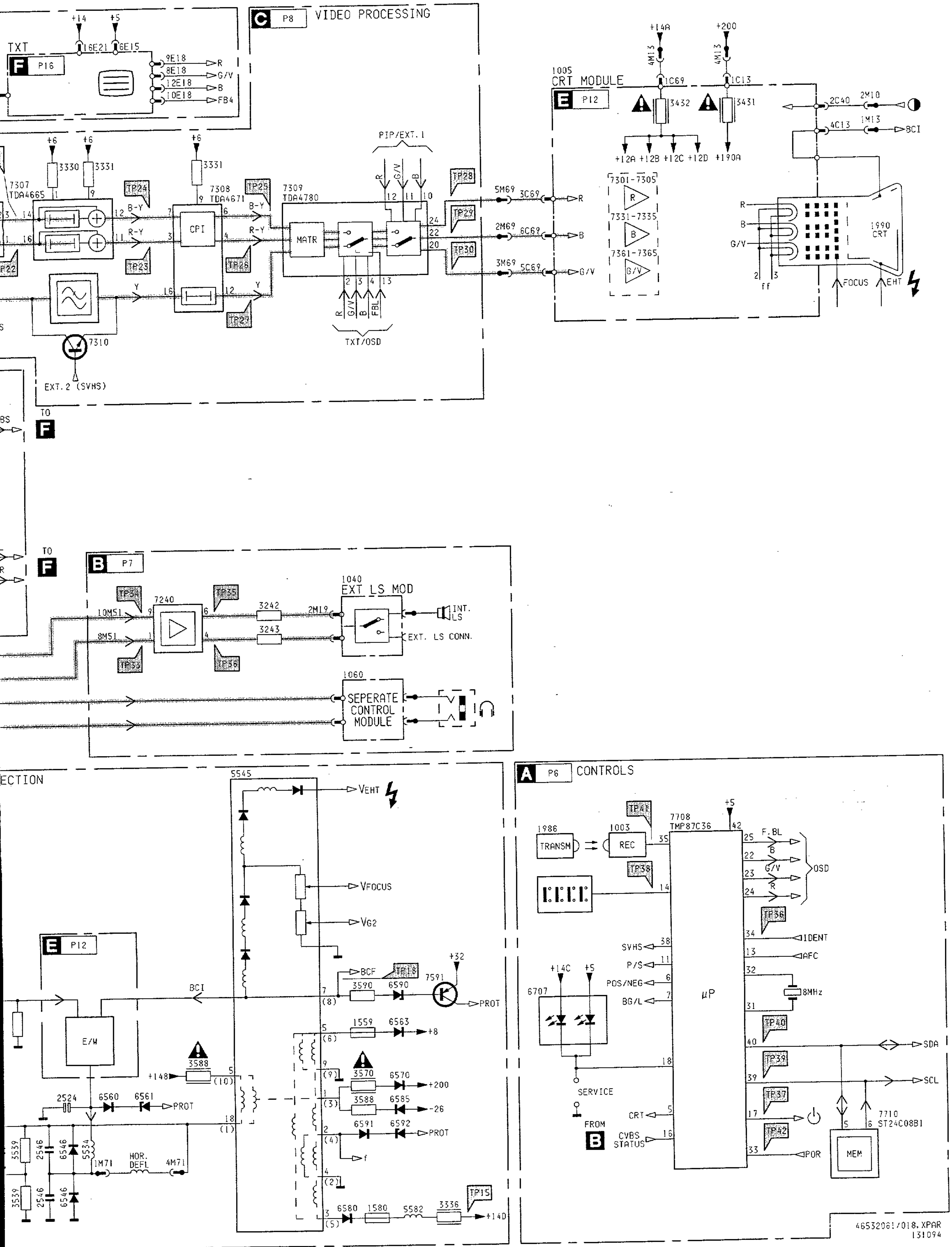
Test point overview/Übersicht Teststellen/Tableau des points à tester


TP23
TP24
TP22
TP21
11
12
7307
14
16
1
TP27
3363
1
7309
24
22
20
TP28
TP30
TP29
TP26
9312
TP25
9331
40
39
35
33
TP40
TP39
TP41
TP42
7708
TP38
TP37
14
17
= 2V8
= 0V
7305
7306
9
TP20
TP20
9
+100
3635
+5V
TP3
TP17
TP6
= 4V8
TP10
= 2V4
TP8
M23
6 5 4 3
2
M37
4 3
2
M36
4
3
1
TP9
5301
TP4
TP12
= 9V7
= 2V7
TP11
= 0V
9667
TP7
TP5
9619
5625
SOPS
+16V
TP1
= 15V9
9697
9699
TP2
-16V
= 15V9
TP13
+148V
+100V
TP32
9231
6675
+32V
TP16
3451
3207
TP31
TP34
9226
IF / SOUND MODULE 1001
TP18
3590
7240
9
6
4
1
TP35
TP36
TP33
5541
TP14
3483
TP15
14V
TUNER 1000
TXT
M12
TP19
1
5545
LOT
TV
3504
3516
3461
TV
TV

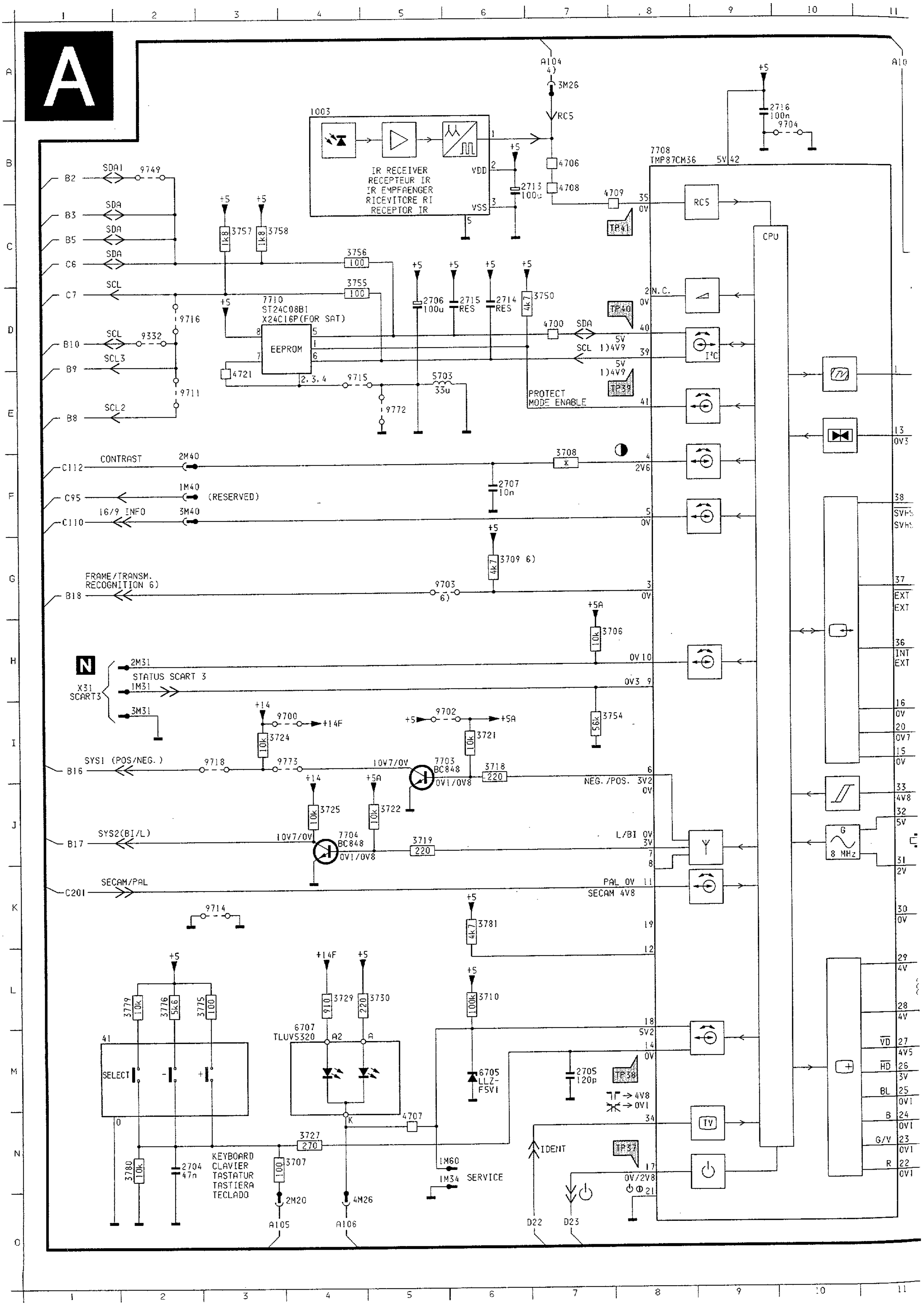
CL 46532047/011
181094

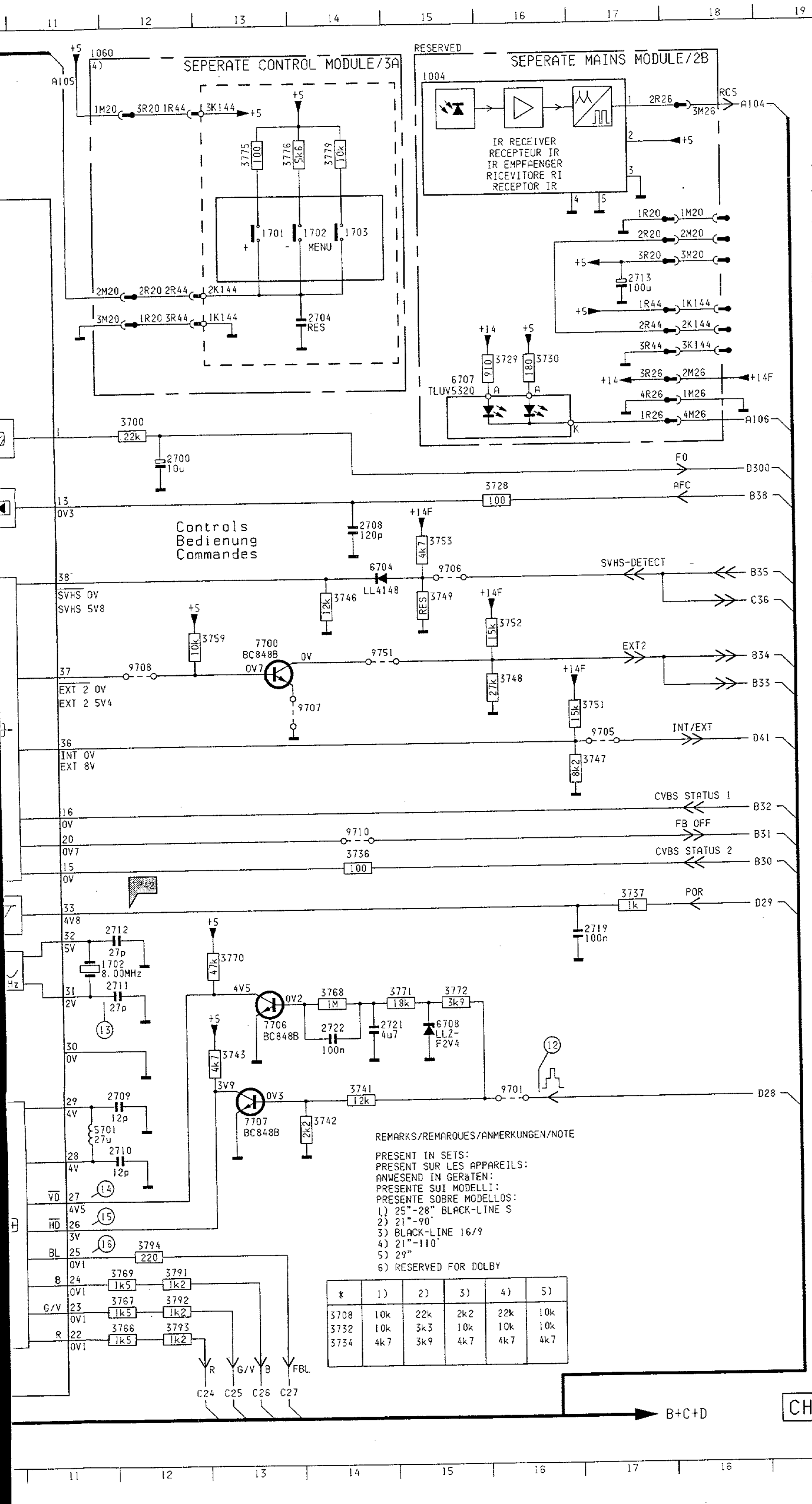
Block diagram/Blockschaltbild/Schéma-bloc


1006
EURO-MODULE
F P15
R L B G R/C CVBS EXT. 2
1 3 5 7 9 11 13 15 17 19 21
2 4 6 8 10 12 14 16 18 20
STATUS
CVBS/Y
TXT
F P16
TXT/ Y/CVBS
3E28
B P7 TUNER
EXT. 4
SEP CONTROLS
C Y/CVBS
L R
+14 VVARI +5
3001
1000
6 11 12
17
13 14
SCL SDA
FREF
1001
IF MODULE
J K L M P21, 22, 25, 26
1000
1003
1004
3G29 5M50
17E21
7004
1 20
15 10
6 7
QPSK 2R R+L
7205
7 8
NICAM SOUND
7304
7305
3 7 7 9 10
R L
11 12
13 14
B P7 EXT. 1
CVBS EXT1
21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
8E21
10E21
11E21
TO
A
CVBS/ STATUS
CVBS EXT. 1
L-EXT. 1
R-EXT. 1
SVHS CVBS
EXT. 2 CVBS
EXT. 3 CVBS
C/CVBS
Y/CVBS
C
L-EXT. 3
R-EXT. 3
SOURCE SELECT
7820
R L
1E28 5F28
3E28 3F28
9673
1008
COMB FILTER
4851
9677
SYNC/CVBS
TP20
TP21
TP22
+6
+14D
7306 TDA4657
7307 TDA4665
7305
TDA 4510
N P27 EXT. 3
7950 HEF4053
CVBS EXT1 FROM
F
13 12 14
CVBS
TO
F
EXT. 2
STATUS
7950 HEF4053
15 L
4 R
2 3 5
7204
SDA
SCL
L R L R
5 3 1 32
15 18 20 13
R L L R
D P10 POWER SUPPLY
1050 SEPERATE MAINS MODULE
SK1
1002 MAINS FILTER MODULE
1600
6602-6605
220V 50Hz
+280
2605
7625
2625
5625
7 3 9
20 21 22 12 13 14 15 19
6640
2640
5632
2641
6641
6630
5630
6675
2675
6661
2660
+16 (+12)
-16 (-12)
(95) 140
+32
PROT
3631
3634
3635
TP1 TP2 TP3 TP4 TP5 TP7 TP8 TP9 TP10 TP11 TP12
2M37 3M37
6M23 4M23
4M37
2M23
+5V
6M36
3650
4M36 3M36 1M36
1007
G P17
SOPS CONTROL MODULE
CNR50
TDA8385
REG& CONTROL
=0V
=2.7V
FOR 21" ::( )
D P10 SYNCHRONISATION & DEFLECTION
FROM
F
CVBS SYNC +14
5 10
50Hz
15625Hz
1 2 17 11 12
+32
7502
7503
7500
3M12
VERT DEFL
1M12
2506
3451
TP16
TP19
E
+32
3548
TP14
7545
7540
5541
2545
3539
2546
6546
2524


C P8 VIDEO PROCESSING
TXT
F P16
+14
+5
1E21
6E15
9E18
8E18
12E18
10E18
R
G/V
B
FB4
+6
+6
3330
3331
3331
7307
TDA4665
TP24
B-Y
R-Y
TP23
TP22
7308
TDA4671
CPI
TP25
TP26
TP27
Y
7310
EXT.2 (SVHS)
7309
TDA4780
MATR
PIP/EXT.1
TXT/OSD
FBL
TP28
TP29
TP30
5M69
3C69
2M69
6C69
3M69
5C69
1005
CRT MODULE
E P12
+14A
+200
4M13
1C69
1C13
3432
3431
+12A +12B +12C +12D
+190A
7301-7305
7331-7335
7361-7365
2C40
2M10
4C13
1M13
BCI
1990
CRT
ff
FOCUS
EHT
TO
F
B P7
TP34
TP35
TP33
TP36
7240
10M51
8M51
3242
3243
2M19
1040
EXT LS MOD
INT. LS
EXT. LS CONN.
1060
SEPERATE CONTROL MODULE
ECTION
5545
VEHT
VFOCUS
VG2
E P12
BCI
E/W
3588
+148
2524
6560
6561
PROT
3539
2546
6546
5534
1M71
HOR. DEFL
4M71
BCF
TP18
3590
6590
7591
+32
1559
6563
+8
3570
6570
+200
3588
6585
-26
6591
6592
f
6580
1580
5582
3336
TP15
+14D
A P6 CONTROLS
1986
TRANSM
1003
REC
TP41
TP38
7708
TMP87C36
+5
F.BL
B
G/V
R
OSD
TP36
IDENT
AFC
8MHz
SVHS
P/S
POS/NEG
BG/L
µP
+14C
6707
SERVICE
TP40
SDA
TP39
SCL
TP37
CRT
FROM
B
CVBS STATUS
TP42
POR
7710
ST24C08B1
MEM
46532061/018.XPAR
131094

Controls/Bedienung/Commandes


A
1003
IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR
VDD
VSS
A104
3M26
RC5
4706
4708
2713 100u
4709
TP41
7708
TMP87CM36
5V 42
2716 100n
9704
+5
A10
RC5
CPU
SDA1
9749
B2
B3
B5
C6
C7
SDA
SCL
3757 1k8
3758 1k8
3756 100
3755 100
7710
ST24C08B1
X24C16P(FOR SAT)
EEPROM
4721
9716
9332
B10
SCL3
B9
9711
SCL2
B8
9715
9772
5703 33u
2706 100u
2715 RES
2714 RES
3750 4k7
4700
N.C.
TP40
1)4V9
PROTECT
MODE ENABLE
TP39
I²C
C112
CONTRAST
2M40
3708
2V6
2707 10n
C95
1M40
(RESERVED)
C110
16/9 INFO
3M40
3709 6)
FRAME/TRANSM.
RECOGNITION 6)
B18
9703
+5A
3706 10k
N
X31
SCART3
2M31
STATUS SCART 3
1M31
3M31
3754 56k
+14
9700
+14F
9702
3724 10k
3721 10k
SYS1 (POS/NEG.)
B16
9718
9773
10V7/0V
7703
BC848
0V1/0V8
3718 220
NEG./POS. 3V2
3725 10k
3722 10k
SYS2(BI/L)
B17
7704
BC848
3719 220
L/BI 0V 3V
SECAM/PAL
C201
PAL 0V
SECAM 4V8
9714
3781 4k7
3710 100k
3779 10k
3776 5k6
3775 100
41
SELECT
3729 910
3730 220
6707
TLUV5320
A2
6705
LLZ-F5V1
2705 120p
TP38
4V8
0V1
4707
3727 270
3780 10k
2704 47n
KEYBOARD
CLAVIER
TASTATUR
TASTIERA
TECLADO
3707 100
2M20
4M26
A105
A106
1M60
1M34 SERVICE
IDENT
TP37
0V/2V8
D22
D23
8 MHz
SVHS
EXT
INT
VD
HD
BL
B
G/Y
R



11 12 13 14 15 16 17 18 19 20
SEPERATE CONTROL MODULE/3A
SEPERATE MAINS MODULE/2B
RESERVED
+5
1060
4)
A105
1M20
3R20 1R44
3K144
3775 100
3776 5k6
3779 10k
1701 +
1702 - MENU
1703
2M20
2R20 2R44
2K144
3M20
1R20 3R44
1K144
2704 RES
1004
IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR
2R26
3M26
RC5
A104
1R20 1M20
2R20 2M20
3R20 3M20
2713 100u
1R44 1K144
2R44 2K144
3R44 3K144
3R26 2M26
4R26 1M26
1R26 4M26
+14 +14F
3729 910
3730 180
6707 TLUV5320
A106
3700 22k
2700 10u
F0
D300
3728 100
AFC
B38
13 0V3
2708 120p
Controls
Bedienung
Commandes
+14F
3753 4k7
6704 LL4148
9706
SVHS-DETECT
B35
C36
38 SVHS 0V SVHS 5V8
3746 12k
3749 RES
3752 15k
3759 10k
7700 BC848B
0V 0V7
9751
EXT2
B34
B33
37 EXT 2 0V EXT 2 5V4
9708
9707
3748 27k
3751 15k
9705
INT/EXT
D41
36 INT 0V EXT 8V
3747 8k2
CVBS STATUS 1
B32
16 0V
FB OFF
9710
B31
20 0V7
3736 100
CVBS STATUS 2
B30
15 0V
TP42
3737 1k
POR
D29
33 4V8
2719 100n
2712 27p
32 5V
1702 8.00MHz
2711 27p
31 2V
13
3770 47k
4V5
7706 BC848B
0V2
3768 1M
3771 18k
3772 3k9
2722 100n
2721 4u7
6708 LLZ-F2V4
12
30 0V
3743 4k7
3V9
7707 BC848B
0V3
3741 12k
3742 2k2
9701
D28
29 4V
2709 12p
5701 27u
2710 12p
28 4V
VD 27 4V5
14
HD 26 3V
15
BL 25 0V1
16
3794 220
B 24 0V1
3769 1k5
3791 1k2
G/V 23 0V1
3767 1k5
3792 1k2
R 22 0V1
3766 1k5
3793 1k2
R G/V B FBL
C24 C25 C26 C27
B+C+D

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

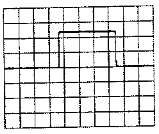
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) BLACK-LINE 16/9
4) 21"-110˚
5) 29"
6) RESERVED FOR DOLBY

*	1)	2)	3)	4)	5)
3708	10k	22k	2k2	22k	10k
3732	10k	3k3	10k	10k	10k
3734	4k7	3k9	4k7	4k7	4k7

A

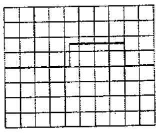
TP37a = DC 2V8
TP37b = DC 0V

TP38a
control +



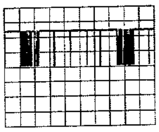
2V/div DC
0.2s div

TP38b
control -



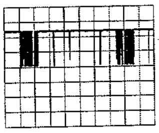
2V/div DC
0.2s div

TP39



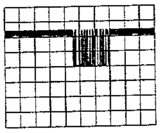
2V/div DC
20ms div

TP40



2V/div DC
20ms div

TP41
RC: volume +



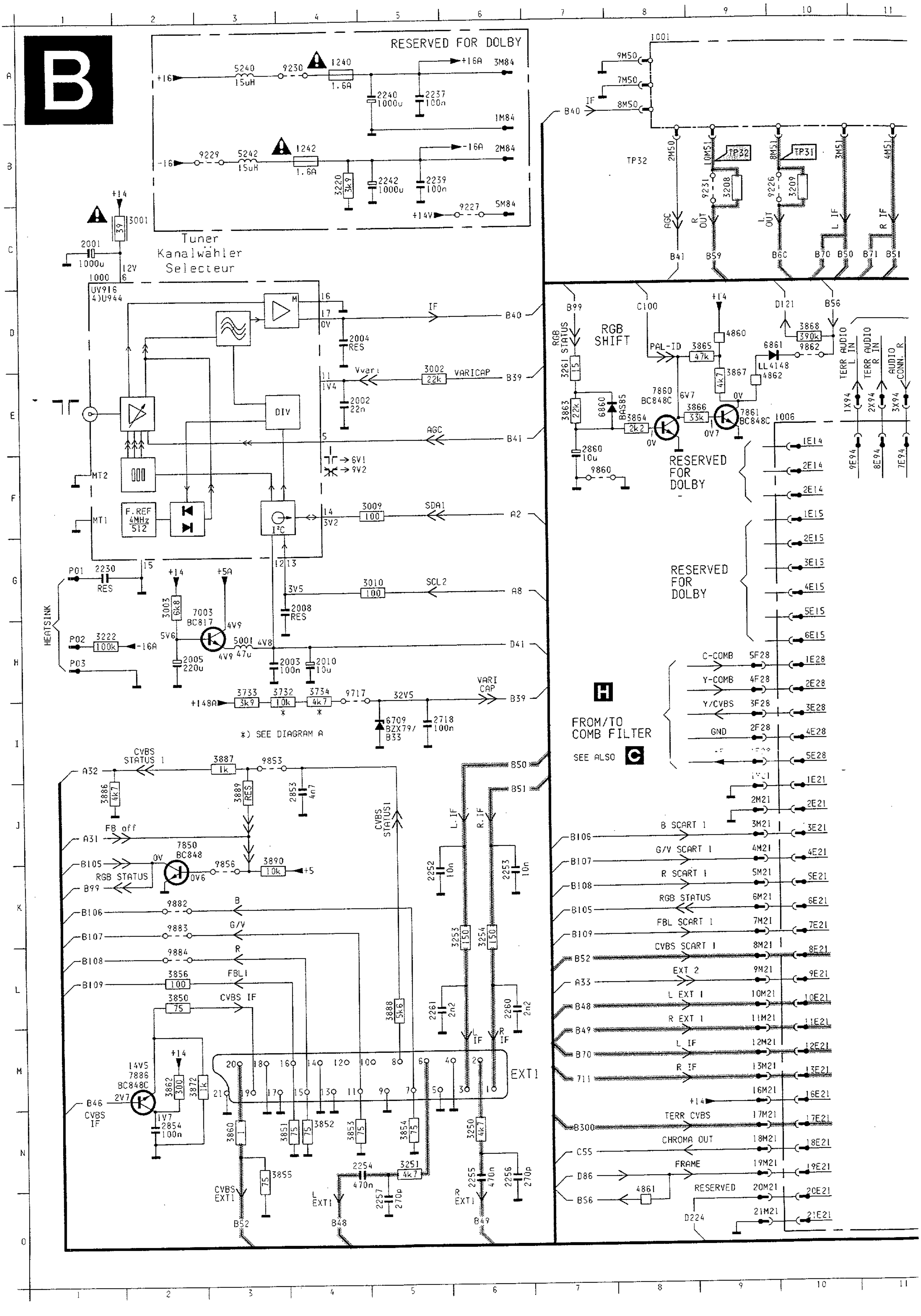
2V/div DC
10ms div

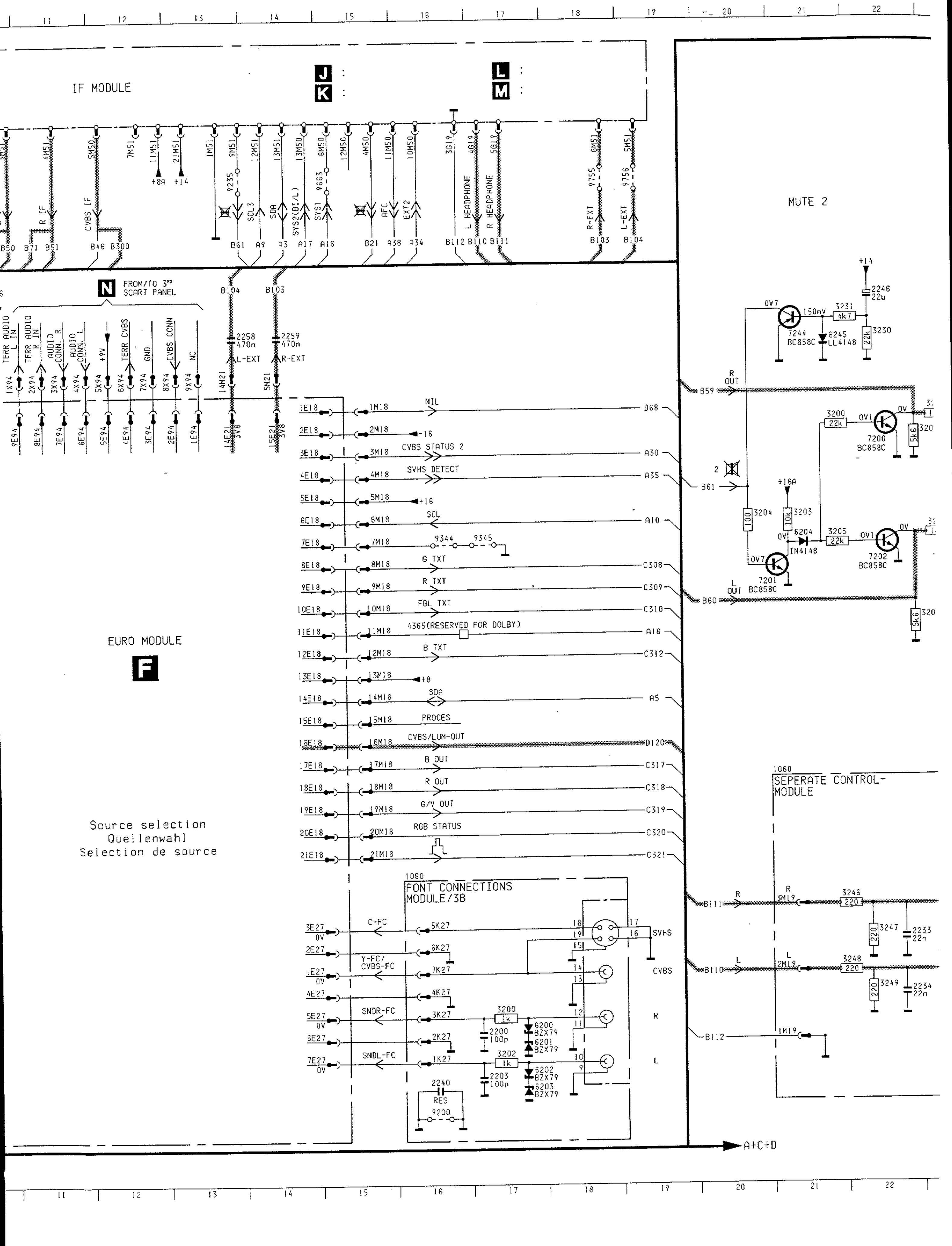
CHASSIS GR2.4

CL 46532061/013.APAR
181094

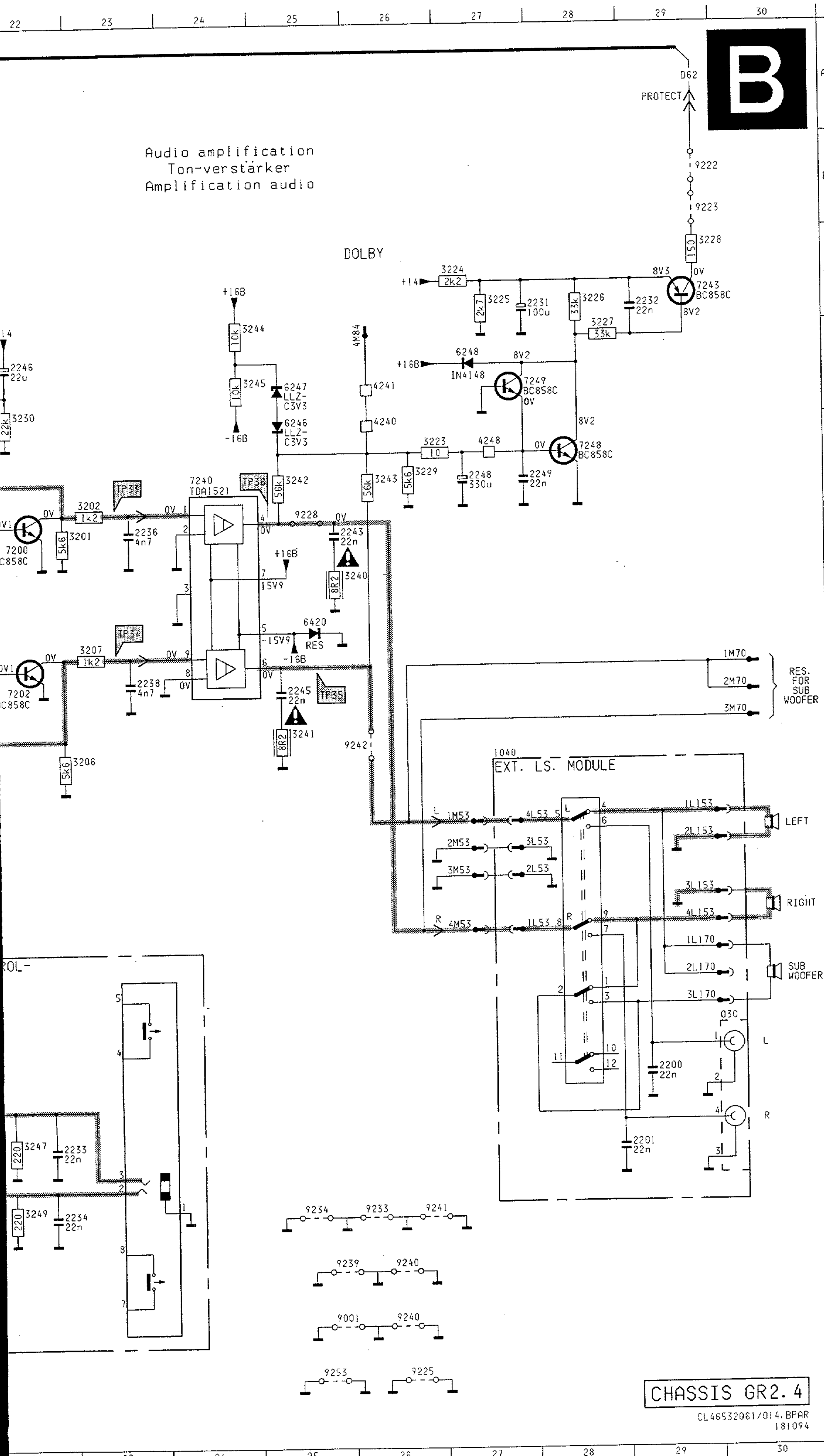
1003	A 4	9714	K 3
1004	A15	9715	E 4
1060	A11	9716	D 2
1701	B13	9718	I 3
1702	B14	9749	B 2
1702	J11	9751	G14
1703	B14	9772	E 5
2700	E12	9773	I 4
2704	C14		
2704	N 2		
2705	M 7		
2706	D 5		
2707	F 6		
2708	F14		
2709	L12		
2710	L12		
2711	K12		
2712	J12		
2713	B 6		
2713	C17		
2714	D 6		
2715	D 6		
2716	A 9		
2719	J17		
2721	K14		
2722	K14		
3700	E12		
3706	H 7		
3707	N 3		
3708	F 7		
3709	G 6		
3710	L 6		
3718	I 6		
3719	J 5		
3721	I 6		
3722	J 5		
3724	I 3		
3725	J 4		
3727	N 4		
3728	E16		
3729	D16		
3729	L 4		
3730	D16		
3730	L 5		
3736	I14		
3737	J17		
3741	L14		
3742	L14		
3743	K13		
3746	F14		
3747	H17		
3748	G16		
3749	F15		
3749	F15		
3750	D 7		
3751	H17		
3752	G16		
3753	F15		
3754	I 7		
3755	D 4		
3756	C 4		
3757	C 3		
3758	C 3		
3759	G13		
3766	N12		
3767	N12		
3768	K14		
3769	N12		
3770	J13		
3771	K15		
3772	K15		
3775	B13		
3775	L 3		
3776	B14		
3776	L 2		
3779	B14		
3779	L 2		
3780	N 2		
3781	K 6		
3791	N12		
3792	N12		
3793	N12		
3794	M12		
41	M 1		
4700	D 7		
4706	B 7		
4707	N 5		
4708	B 7		
4709	B 8		
4721	E 3		
5701	L11		
5703	E 5		
6704	F14		
6705	M 6		
6707	D15		
6707	M 4		
6708	K15		
7700	G13		
7703	I 5		
7704	J 4		
7706	K13		
7707	L13		
7708	B 8		
7710	D 3		
9332	D 2		
9700	I 4		
9701	L16		
9702	I 5		
9703	G 5		
9704	B10		
9705	H17		
9706	F15		
9707	H14		
9708	G12		
9710	I14		
9711	E 2		

Tuner/Kanalwähler/Sélecteur


B
RESERVED FOR DOLBY
+16
5240 15uH
9230
1240 1.6A
+16A 3M84
2240 1000u
2237 100n
1M84
-16
9229
5242 15uH
1242 1.6A
-16A 2M84
3220 3k9
2242 1000u
2239 100n
9227
5M84
+14V
+14
3001 39
2001 1000u
12V
Tuner
Kanalwähler
Sélecteur
1000
UV916
4)U944
IF
B40
2004 RES
Vvari
3002 22k
VARICAP
B39
2002 22n
DIV
AGC
B41
6V1
9V2
MT2
MT1
F.REF 4MHz 512
I²C
3009 100
SDA1
A2
P01
2230 RES
HEATSINK
P02
3222 100k
-16A
P03
+14
+5A
3003 6k8
7003 BC817
5V6
4V9
5001 47u
4V8
3V5
3010 100
SCL2
A8
2008 RES
2005 220u
2003 100n
2010 10u
D41
+148A
3733 3k9
3732 10k
3734 4k7
9717
32V5
VARI CAP
6709 BZX79/ B33
2718 100n
*) SEE DIAGRAM A
A32
CVBS STATUS 1
3887 1k
9853
3886 4k7
3889 RES
2853 4n7
CVBS STATUS1
A31
FB off
7850 BC848
B105
RGB STATUS
B99
9856
3890 10k
+5
B106
9882
B
B107
9883
G/V
B108
9884
R
B109
3856 100
FBL1
3850 75
CVBS IF
14V5
7886 BC848C
B46
CVBS IF
2V7
1V7
2854 100n
3862 300
3872 1k
3888 5k6
EXT1
3860
3855 75
3851 75
3852
3853 75
3854 75
2254 470n
3251 4k7
2257 270p
CVBS EXT1
B52
L EXT1
B48
L IF
R IF
2252 10n
2253 10n
3253 150
3254 150
2261 2n2
2260 2n2
B50
B51
3250 4k7
2255 470n
2256 270p
R EXT1
B49
1001
9M50
7M50
8M50
TP32
2M50
10M51
9231
3208
8M51
TP31
9226
3209
3M51
4M51
AGC
R OUT
L OUT
L IF
R IF
B59
B60
B70
B71
B99
C100
+14
D121
B56
RGB STATUS
RGB SHIFT
4860
3868 390k
9862
PAL-ID
3865 47k
6861
LL4148
4862
3261 15
3867 4k7
7860 BC848C
6V7
0V
3863 22k
6860 BAS85
3864 2k2
3866 33k
7861 BC848C
0V7
1006
2860 10u
9860
RESERVED FOR DOLBY
TERR AUDIO L IN
TERR AUDIO R IN
AUDIO CONN. R
1X94
2X94
3X94
9E94
8E94
7E94
1E14
2E14
2E14
1E15
2E15
3E15
4E15
5E15
6E15
C-COMB
5F28
1E28
Y-COMB
4F28
2E28
Y/CVBS
3F28
3E28
H
FROM/TO COMB FILTER
GND
2F28
4E28
SEE ALSO C
5E28
1M21
1E21
2M21
2E21
B SCART 1
3M21
3E21
G/V SCART 1
4M21
4E21
R SCART 1
5M21
5E21
RGB STATUS
6M21
6E21
FBL SCART 1
7M21
7E21
CVBS SCART 1
8M21
8E21
B52
EXT 2
9M21
9E21
A33
L EXT 1
10M21
10E21
R EXT 1
11M21
11E21
L IF
12M21
12E21
R IF
13M21
13E21
711
+14
16M21
16E21
TERR CVBS
17M21
17E21
B300
CHROMA OUT
18M21
18E21
C55
FRAME
19M21
19E21
D86
4861
RESERVED
20M21
20E21
B56
D224
21M21
21E21


IF MODULE
J :
K :
L :
M :
4M51
5M50
7M51
11M51
21M51
1M51
9M51
12M51
13M51
13M50
6M50
12M50
4M50
11M50
10M50
3G19
4G19
5G19
6M51
5M51
+8A
+14
9235
9663
9755
9756
R IF
CVBS IF
SCL3
SDA
SYS2(BI/L)
SYS1
AFC
EXT2
L HEADPHONE
R HEADPHONE
R-EXT
L-EXT
B50
B71
B51
B46
B300
B61
A9
A3
A17
A16
B21
A38
A34
B112
B110
B111
B103
B104
N
FROM/TO 3RD SCART PANEL
TERR AUDIO L IN
TERR AUDIO R IN
AUDIO CONN. R
AUDIO CONN. L
+9V
TERR CVBS
GND
CVBS CONN
NC
1X94
2X94
3X94
4X94
5X94
6X94
7X94
8X94
9X94
9E94
8E94
7E94
6E94
5E94
4E94
3E94
2E94
1E94
2258 470n
2259 470n
L-EXT
R-EXT
14M21
5M21
14E21 3V8
15E21 3V8
1E18
1M18
NIL
D68
2E18
2M18
-16
3E18
3M18
CVBS STATUS 2
A30
4E18
4M18
SVHS DETECT
A35
5E18
5M18
+16
6E18
6M18
SCL
A10
7E18
7M18
9344
9345
8E18
8M18
G TXT
C308
9E18
9M18
R TXT
C309
10E18
10M18
FBL TXT
C310
11E18
11M18
4365(RESERVED FOR DOLBY)
A18
12E18
12M18
B TXT
C312
13E18
13M18
+8
14E18
14M18
SDA
A5
15E18
15M18
PROCES
16E18
16M18
CVBS/LUM-OUT
D120
17E18
17M18
B OUT
C317
18E18
18M18
R OUT
C318
19E18
19M18
G/V OUT
C319
20E18
20M18
RGB STATUS
C320
21E18
21M18
C321
EURO MODULE
F
Source selection
Quellenwahl
Selection de source
1060
FONT CONNECTIONS MODULE/3B
3E27 0V
2E27
1E27 0V
4E27
5E27 0V
6E27
7E27 0V
C-FC
Y-FC/ CVBS-FC
SNDR-FC
SNDL-FC
5K27
6K27
7K27
4K27
3K27
2K27
1K27
SVHS
CVBS
R
L
3200 1k
3202 1k
2200 100p
2203 100p
6200 BZX79
6201 BZX79
6202 BZX79
6203 BZX79
2240 RES
9200
MUTE 2
+14
2246 22u
0V7
150mV
3231 4k7
3230 22k
7244 BC858C
6245 LL4148
R OUT
B59
3200 22k
0V1
7200 BC858C
0V
5k6
320
2
B61
+16A
3204 100
3203 10k
6204 IN4148
3205 22k
7202 BC858C
7201 BC858C
L OUT
B60
1060
SEPERATE CONTROL-MODULE
B111
R
3M19
3246 220
3247 220
2233 22n
B110
L
2M19
3248 220
3249 220
2234 22n
B112
1M19
A+C+D
11
12
13
14
15
16
17
18
19
20
21
22

Audio amplification
Ton-verstärker
Amplification audio

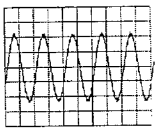

22
23
24
25
26
27
28
29
30
B
D62
PROTECT
9222
9223
3228
150
DOLBY
+14
3224
2k2
3225
2k7
2231
100u
3226
33k
2232
22n
8V3
0V
7243
BC858C
8V2
3227
33k
+16B
3244
10k
3245
10k
6247
LLZ-
C3V3
6246
LLZ-
C3V3
-16B
4M84
4241
4240
6248
IN4148
8V2
7249
BC858C
0V
+16B
7248
BC858C
3223
10
4248
2248
330u
2249
22n
3229
5k6
3243
56k
3242
56k
TP36
7240
TDA1521
2246
22u
3230
22k
TP33
3202
1k2
0V
2236
4n7
3201
5k6
7200
BC858C
9228
0V
2243
22n
3240
8R2
+16B
15V9
6420
RES
-15V9
-16B
TP34
3207
1k2
2238
4n7
7202
BC858C
2245
22n
TP35
3241
8R2
9242
3206
5k6
1M70
2M70
3M70
RES.
FOR
SUB
WOOFER
1040
EXT. LS. MODULE
1M53
4L53
2M53
3L53
3M53
2L53
4M53
1L53
1LL53
2LL53
3LL53
4LL53
LEFT
RIGHT
1LL70
2LL70
3LL70
SUB
WOOFER
030
L
R
2200
22n
2201
22n
3247
220
2233
22n
3249
220
2234
22n
9234
9233
9241
9239
9240
9001
9240
9253
9225
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

CHASSIS GR2.4

CL46532061/014.BPAR
181094

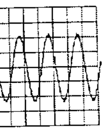
1000	C 1	3890	K 3
1001	A 8	4240	E26
1006	E10	4241	D26
1040	H27	4248	E27
1060	J20	4365	H *
1060	L16	4860	D 9
1240	A 4	4861	O 8
1242	B 4	4862	E 9
2001	C 1	5001	H 3
2002	E 4	5240	A 3
2003	H 3	5242	B 3
2004	D 4	6200	N17
2005	H 2	6201	N17
2008	G 4	6202	N17
2010	H 4	6203	N17
2200	L29	6204	G21
2200	N17	6245	E21
2201	L29	6246	E25
2203	N17	6247	D25
2230	G 1	6248	D27
2231	C28	6420	G25
2232	C29	6709	I 5
2233	L22	6860	E 7
2234	M22	6861	D10
2236	F23	7003	G 3
2237	A 5	7200	F22
2238	G23	7201	H21
2239	B 5	7202	G22
2240	A 5	7240	E24
2240	N16	7243	C29
2242	B 5	7244	D21
2243	F25	7248	E28
2245	G25	7249	D27
2246	D22	7850	J 2
2248	E27	7860	E 8
2249	E28	7861	E 9
2252	K 5	7886	M 2
2253	K 6	9001	N25
2254	N 4	9200	O16
2255	N 6	9222	B29
2256	N 6	9223	B29
2257	O 5	9225	O26
2258	D13	9226	B10
2259	D14	9227	C 6
2260	L 6	9228	F25
2261	L 5	9229	B 3
2718	I 5	9230	A 4
2853	J 4	9231	B 9
2854	N 2	9233	M26
2860	F 7	9234	M25
3001	C 2	9235	B13
3002	E 5	9239	N25
3003	G 2	9240	N26
3009	F 5	9240	N26
3010	G 5	9241	M26
3200	F21	9242	H26
3200	M17	9253	O25
3201	F23	9344	G16
3202	E23	9345	G17
3202	N17	9663	B15
3203	G21	9717	H 4
3204	G20	9755	B18
3205	G21	9756	B19
3206	H23	9853	I 3
3207	G23	9856	K 3
3208	B 9	9860	F 7
3209	B10	9862	D10
3220	B 4	9882	K 2
3222	H 1	9883	K 2
3223	E26	9884	L 2
3224	C27		
3225	C27		
3226	C28		
3227	D28		
3228	C29		
3229	E26		
3230	D22		
3231	D22		
3240	F25		
3241	H25		
3242	E25		
3243	E26		
3244	C24		
3245	D24		
3246	L22		
3247	L22		
3248	M22		
3249	M22		
3250	N 6		
3251	N 5		
3253	K 6		
3254	K 6		
3261	E 7		
3732	H 3		
3733	H 3		
3734	H 4		
3850	L 2		
3851	N 3		
3852	N 4		
3853	N 4		
3854	N 5		
3855	N 3		
3856	L 2		
3860	N 3		
3862	M 2		
3863	E 7		
3864	E 8		
3865	D 9		
3866	E 9		
3867	E 9		
3868	D10		
3872	M 2		
3886	J 1		
3887	I 3		
3888	L 5		
3889	J 3		

* TP31



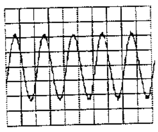
10mV/div AC
0.5ms div

* TP32



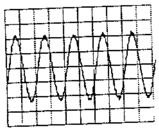
10mV/div AC
0.5ms div

* TP33



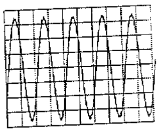
10mV/div AC
0.5ms div

* TP34



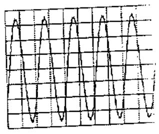
10mV/div AC
0.5ms div

* TP35



200mV/div AC
0.5ms div

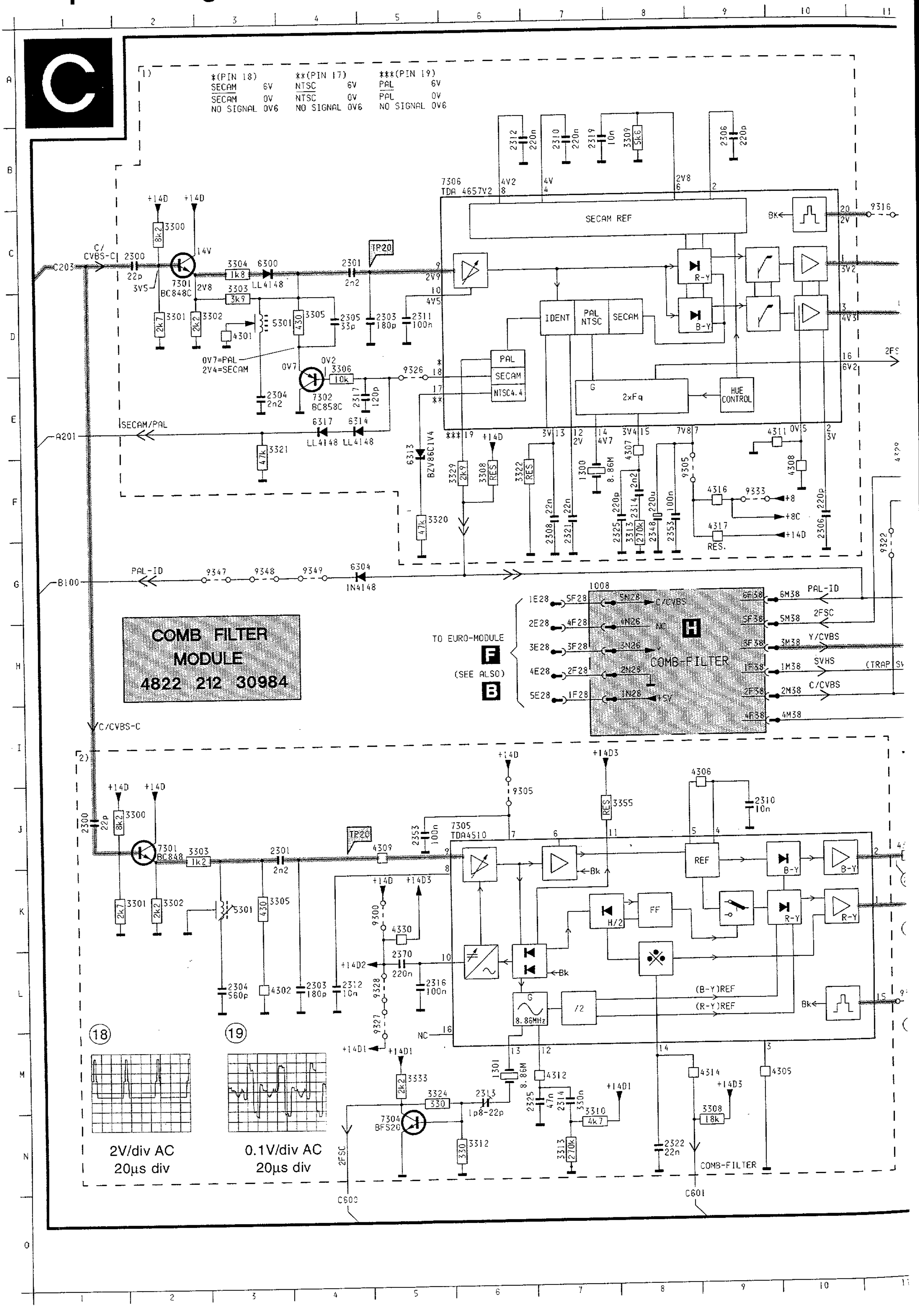
* TP36



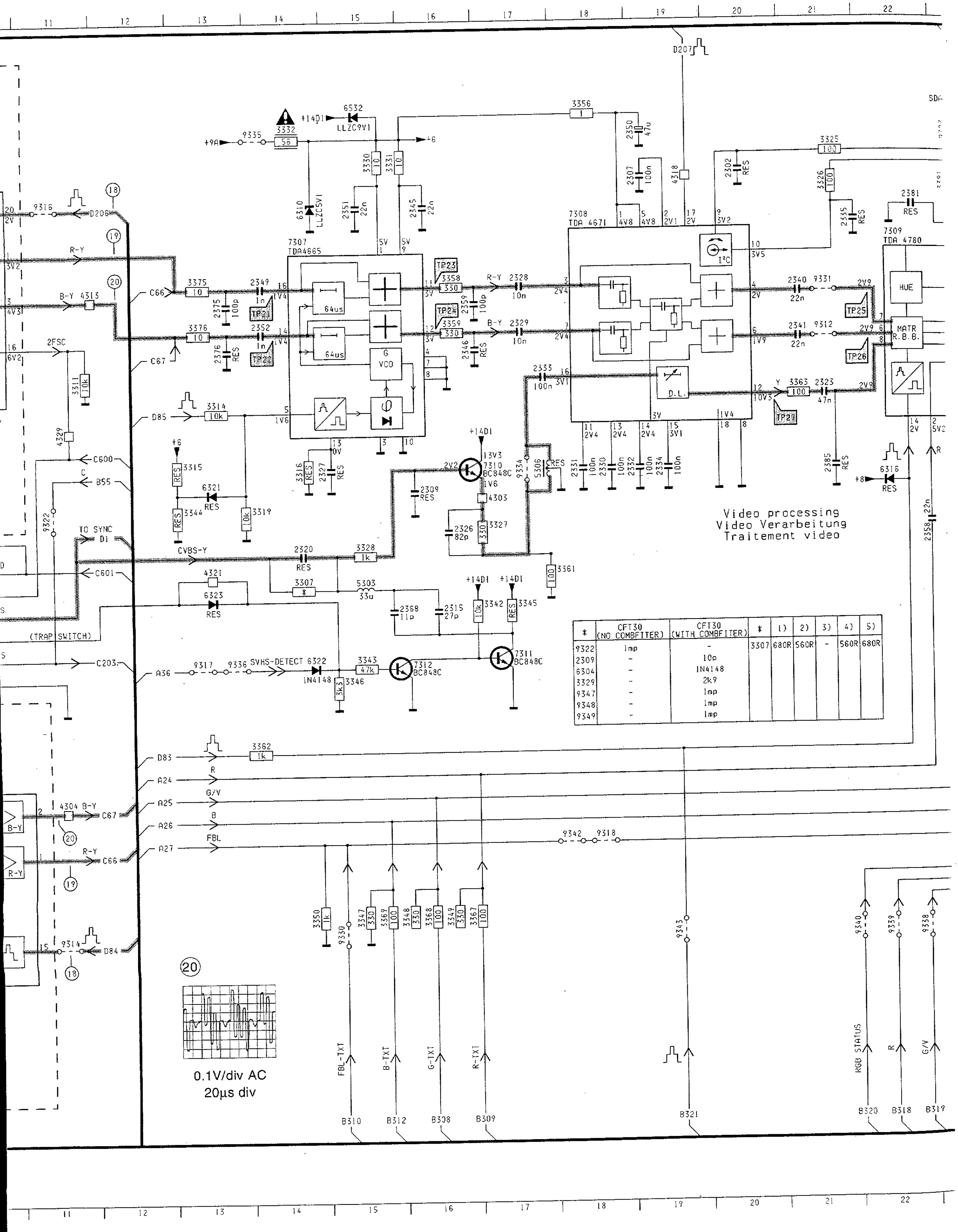
200mV/div AC
0.5ms div

* measured at ⊿ = 50%

Video processing/Video Verarbeitung/


C
*(PIN 18) SECAM 6V SECAM 0V NO SIGNAL 0V6
**(PIN 17) NTSC 6V NTSC 0V NO SIGNAL 0V6
***(PIN 19) PAL 6V PAL 0V NO SIGNAL 0V6
7306 TDA 4657V2
SECAM REF
IDENT
PAL NTSC
SECAM
R-Y
B-Y
PAL
SECAM
NTSC4.4
2xFq
HUE CONTROL
TP20
C203
A201
B100
C/CVBS-C
SECAM/PAL
PAL-ID
7301 BC848C
7302 BC858C
0V7=PAL
2V4=SECAM
6313 BZV86C1V4
1300 8.86M
9316
2FS
COMB FILTER MODULE 4822 212 30984
TO EURO-MODULE
F
(SEE ALSO)
B
1008
C/CVBS
NC
H
COMB-FILTER
+5V
PAL-ID
2FSC
Y/CVBS
SVHS
(TRAP
C/CVBS
7305 TDA4510
REF
B-Y
R-Y
H/2
FF
Bk
8.86MHz
/2
(B-Y)REF
(R-Y)REF
7304 BF520
1301 8.86M
COMB-FILTER
C600
C601
18
19
2V/div AC
20μs div
0.1V/div AC
20μs div
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
1
2
3
4
5
6
7
8
9
10
11

Traitement video

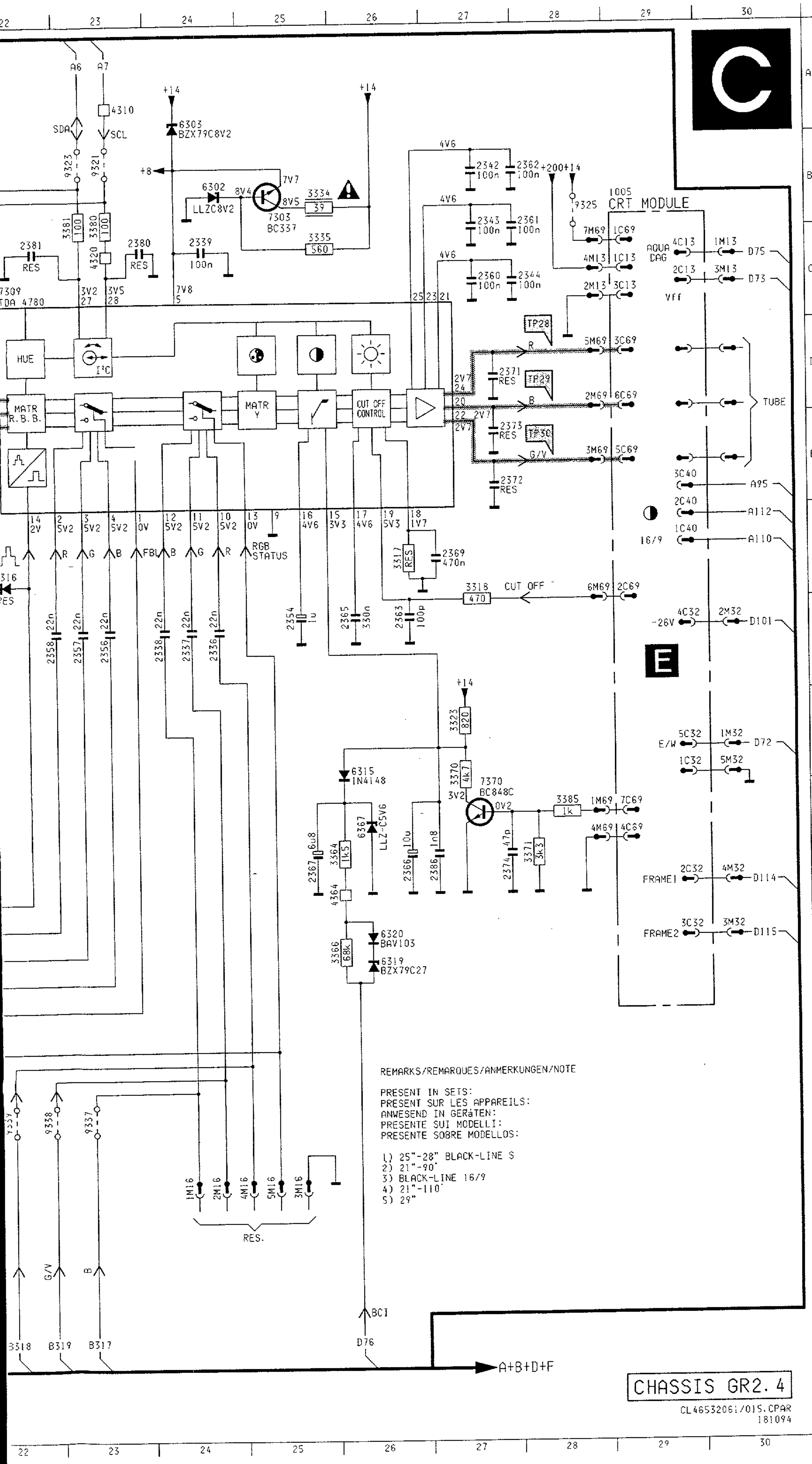

11
12
13
14
15
16
17
18
19
20
21
22
D207
SDA
3356
1
2350
47u
+14D1
6532
LLZC9V1
9335
3332
56
+9A
+6
3330
10
3331
10
6310
LLZC5V1
2351
22n
2345
22n
2307
100n
4318
2302
RES
3325
100
3326
100
2381
RES
2355
RES
7307
TDA4665
7308
TDA 4671
7309
TDA 4780
I²C
HUE
MATR
R.B.B.
64us
VCO
D.L.
TP21
TP22
TP23
TP24
TP25
TP26
TP27
R-Y
B-Y
4313
C66
C67
3375
10
3376
10
2349
1n
2352
1n
2375
100p
2376
RES
3358
330
3359
330
2359
100p
2346
RES
2328
10n
2329
10n
2340
22n
9331
2341
22n
9312
2333
100n
Y
3363
100
2323
47n
2385
RES
2FSC
3311
10k
4329
D85
3314
10k
3315
RES
3344
RES
6321
RES
3319
10k
3316
RES
2327
RES
+14D1
7310
BC848C
2309
RES
4303
2326
82p
3327
330
9334
5306
RES
2331
100n
2330
100n
2332
100n
2334
100n
3361
100
6316
RES
+8
2358
22n
R
C600
C
B55
9322
TO SYNC
D1
CVBS-Y
2320
RES
3328
1k
C601
4321
6323
RES
3307
*
5303
33u
2368
11p
2315
27p
3342
10k
3345
RES
7311
BC848C
(TRAP SWITCH)
C203
A36
9317
9336
SVHS-DETECT
6322
1N4148
3343
47k
3346
3k3
7312
BC848C
D206
9316
D83
3362
1k
A24
R
A25
G/V
A26
B
A27
FBL
9342
9318
4304
B-Y
C67
R-Y
C66
9314
D84
3350
1k
9330
3347
330
3369
100
3348
330
3368
100
3349
330
3367
100
9343
9340
9339
9338
FBL-TXT
B-TXT
G-TXT
R-TXT
RGB STATUS
R
G/V
B310
B312
B308
B309
B321
B320
B318
B319
18
19
20

Video processing
Video Verarbeitung
Traitement video

*	CFT30 (NO COMBFITER)	CFT30 (WITH COMBFITER)	*	1)	2)	3)	4)	5)
9322	lmp	-	3307	680R	560R	-	560R	680R
2309	-	10p						
6304	-	1N4148						
3329	-	2k9						
9347	-	lmp						
9348	-	lmp						
9349	-	lmp						

⑳

0.1V/div AC
20µs div


22
23
24
25
26
27
28
29
30
A6
A7
SDA
SCL
4310
9323
9321
+14
6303
BZX79C8V2
+8
6302
LLZC8V2
8V4
7V7
8V5
7303
BC337
3334
39
3335
560
3381
100
3380
100
4320
2381
RES
2380
RES
2339
100n
7309
TDA 4780
3V2
27
3V5
28
7V8
5
4V6
2342
100n
2362
100n
+200+14
9325
1005
CRT MODULE
2343
100n
2361
100n
2360
100n
2344
100n
25
23
21
7M69
1C69
4M13
1C13
AQUA
DAG
4C13
1M13
D75
2C13
3M13
D73
2M13
3C13
VFF
TP28
R
5M69
3C69
HUE
I²C
MATR
R.B.B.
MATR
Y
CUT OFF
CONTROL
2V7
24
20
22
2V7
2V7
2371
RES
TP29
B
2M69
6C69
TUBE
2373
RES
TP30
G/V
3M69
5C69
2372
RES
3C40
A95
2C40
A112
1C40
16/9
A110
14
2V
2
5V2
3
5V2
4
5V2
1
0V
12
5V2
11
5V2
10
5V2
13
0V
9
16
4V6
15
3V3
17
4V6
19
5V3
18
1V7
R
G
B
FBL
B
G
R
RGB
STATUS
316
ES
3317
RES
2369
470n
3318
470
CUT OFF
6M69
2C69
4C32
2M32
-26V
D101
2358
22n
2357
22n
2356
22n
2338
22n
2337
22n
2336
22n
2354
1u
2365
330n
2363
100p
E
+14
3323
820
5C32
1M32
E/W
D72
1C32
5M32
6315
1N4148
3370
4k7
7370
BC848C
3V2
0V2
3385
1k
1M69
7C69
4M69
4C69
6367
LLZ-C5V6
2367
6u8
3364
1k5
2366
10u
2386
1n8
2374
47p
3371
3k3
4364
2C32
4M32
FRAME1
D114
6320
BAV103
3366
68k
6319
BZX79C27
3C32
3M32
FRAME2
D115
9339
9338
9337
1M16
2M16
4M16
5M16
3M16
RES.
G/V
B
BC1
3318
B319
B317
D76
A+B+D+F
CHASSIS GR2.4
CL46532061/015.CPAR
181094
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) 25"-28" BLACK-LINE S
2) 21"-90°
3) BLACK-LINE 16/9
4) 21"-110°
5) 29"

1005	B29	3319	G14	9328	L 5
1008	G 7	3320	F 5	9330	L15
1300	F 7	3321	E 3	9331	D21
1301	M 6	3322	F 6	9333	F 9
2300	C 2	3323	H27	9334	F17
2300	J 1	3324	M 5	9335	B14
2301	C 4	3325	B21	9336	I13
2301	J 3	3326	B21	9337	L23
2302	B20	3327	G17	9338	L22
2303	D 5	3328	G15	9339	L22
2303	L 4	3329	F 6	9340	L21
2304	E 3	3330	B15	9342	K18
2304	L 3	3331	B15	9343	L19
2305	D 4	3332	B14	9347	G 3
2306	B 9	3333	M 5	9348	G 3
2306	F10	3334	B25	9349	G 4
2307	B19	3335	C25		
2308	F 7	3342	H17		
2309	F16	3343	I15		
2310	B 7	3344	G13		
2310	J 9	3345	H17		
2311	D 5	3346	I15		
2312	B 6	3347	L15		
2312	L 4	3348	L16		
2313	M 6	3349	L16		
2314	F 8	3350	L14		
2314	M 7	3355	J 7		
2315	H16	3356	A18		
2316	L 5	3358	D16		
2317	E 4	3359	D16		
2319	B 7	3361	G18		
2320	G14	3362	J14		
2321	F 7	3363	E21		
2322	N 8	3364	I26		
2323	E21	3366	J26		
2325	F 8	3367	L16		
2325	M 6	3368	L16		
2326	G16	3369	L15		
2327	F15	3370	H27		
2328	D17	3371	I28		
2329	D17	3375	D13		
2330	F18	3376	D13		
2331	F18	3380	B23		
2332	F19	3381	B23		
2333	E17	3385	I28		
2334	F19	4301	D 3		
2335	C21	4302	L 3		
2336	G24	4303	F17		
2337	G24	4304	J11		
2338	G24	4305	M 9		
2339	C24	4306	I 9		
2340	D21	4307	F 8		
2341	D21	4308	F10		
2342	B27	4309	J 5		
2343	B27	4310	A23		
2344	C28	4311	E10		
2345	C16	4312	M 7		
2346	E16	4313	D11		
2348	F 8	4314	M 8		
2349	D14	4316	F 9		
2350	B19	4317	F 9		
2351	C15	4318	B19		
2352	D14	4320	C23		
2353	F 8	4321	G13		
2353	J 5	4329	F11		
2354	G25	4330	K 5		
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2357	G23	5301	D 3		
2358	G22	5301	K 3		
2359	D16	5303	H15		
2360	C27	5306	F17		
2361	B28	6300	C 3		
2362	B28	6302	B24		
2363	G26	6303	A24		
2365	G26	6304	G 4		
2366	I26	6310	C14		
2367	I25	6313	F 5		
2368	H15	6314	E 4		
2369	F27	6315	H26		
2370	L 5	6316	F22		
2371	D27	6317	E 4		
2372	E27	6319	J26		
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2376	E13	6323	H13		
2380	C23	6367	I26		
2381	C22	6532	A15		
2385	F21	7301	C 2		
2386	I27	7301	J 2		
3300	C 2	7302	E 4		
3300	J 2	7303	B25		
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3302	D 3	7306	B 5		
3302	K 2	7307	C14		
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3305	D 4	7311	I17		
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3308	F 6	9305	F 8		
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3309	B 8	9312	D21		
3310	N 7	9314	L11		
3311	E11	9316	C11		
3312	N 6	9317	I13		
3313	G 8	9318	K18		
3313	N 7	9321	B23		
3314	E13	9322	G11		
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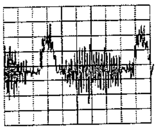
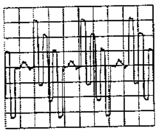
TP20



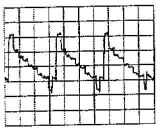
20mV/div AC
10µs div

TP26



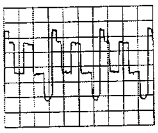
0.2V/div AC
20µs div

TP27



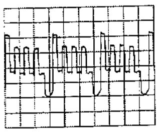
0.1V/div AC
20µs div

TP28



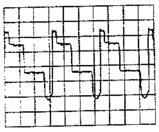
0.5V/div AC
20µs div

TP29



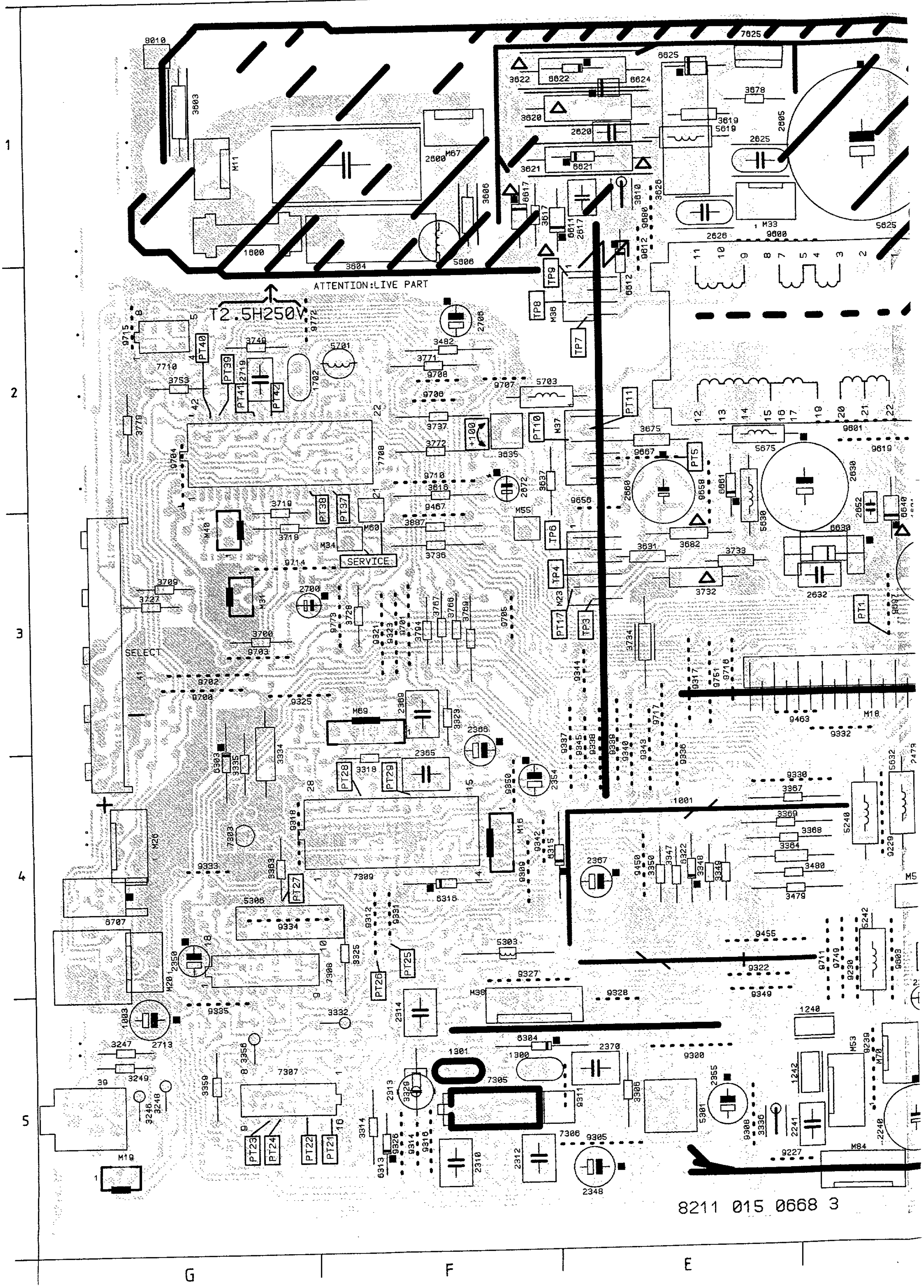
0.5V/div AC
20µs div

TP30



0.5V/div AC
20µs div

Mono carrier / Hauptplatine / Châssis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4
5
G
F
E
9010
3603
M11
2600
M67
1000
3604
5806
3606
7625
6625
3622
6622
6624
3678
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2620
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2805
2625
3621
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6617
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6611
2617
3610
9680
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2626
M33
9600
5625
TP9
TP8
M36
TP7
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6612
9715
7710
3753
3749
PT40
PT39
PT41
2719
PT42
1702
5701
9772
3482
3771
9708
9707
5703
9706
3737
+100
PT10
M37
PT11
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M55
TP6
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3767
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3769
9705
TR4
M23
PT17
TP3
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PT1
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M53
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M70
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3248
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7307
1301
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2241
2240
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PT24
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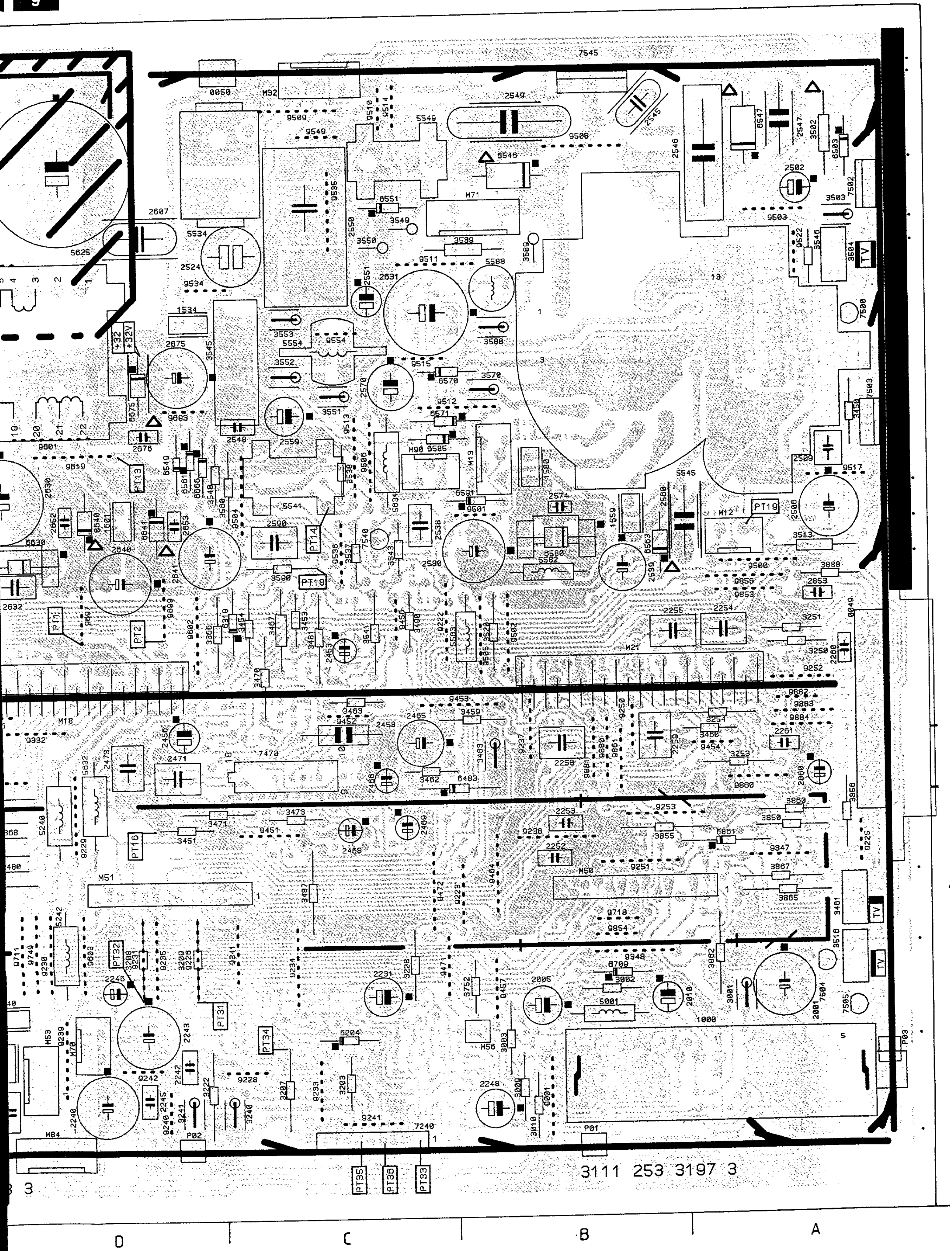
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+32V
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PT19
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1601
PT14
PT18
PT1
PT2
M21
M18
2060
PT16
M51
M50
PT32
2005
2010
2001
PT31
PT34
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P03
M84
P02
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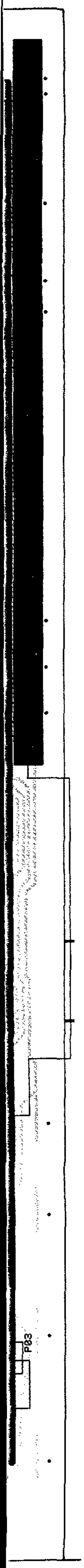
PT35
PT36
PT33
3111 253 3197 3
D
C
B
A



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1000	A5	3329	F5	5606	F1	9348	B4
1003	G4	3332	F5	5619	E1	9349	E5
1240	D5	3334	G4	5625	D2	9350	F4
1242	D5	3335	G4	5630	E3	9450	E4
1300	F5	3336	E5	5631	C2	9451	C4
1301	F5	3347	E4	5632	D4	9452	C3
1534	D2	3348	E4	5675	E2	9453	B3
1559	B3	3349	E4	5701	F2	9454	A4
1580	B2	3350	E4	5703	E2	9455	E4
1600	G1	3356	G5	6204	C5	9456	C3
1601	D3	3359	G5	6303	G4	9457	B5
1702	G2	3363	G4	6304	F5	9463	D3
2001	A5	3364	D4	6313	F5	9464	B4
2005	B5	3366	C3	6315	E4	9467	F3
2010	B5	3367	D4	6316	F4	9471	C5
2231	C5	3368	E4	6319	C3	9472	C4
2240	D5	3369	E4	6322	E4	9500	A3
2241	D5	3450	A2	6483	B4	9501	B3
2242	D5	3451	D4	6503	A1	9502	B3
2243	D5	3453	C3	6546	B1	9503	A1
2245	D5	3454	C3	6547	A1	9504	C2
2246	D5	3459	B3	6549	D2	9505	B3
2248	B5	3460	A3	6551	C1	9506	C2
2252	B4	3461	A4	6561	D2	9508	B1
2253	B4	3462	C4	6563	B3	9509	C1
2254	A3	3463	C3	6570	B2	9510	C1
2255	B3	3467	C3	6571	B2	9511	C1
2258	B4	3470	C3	6580	B3	9512	B2
2259	B4	3471	C4	6585	C2	9513	C2
2260	A3	3473	C4	6591	B2	9514	C1
2261	A4	3479	D4	6611	E1	9515	C2
2310	F5	3480	D4	6612	E2	9517	A2
2312	F5	3481	C3	6617	F1	9522	A1
2313	F5	3482	F2	6621	E1	9534	D2
2314	F5	3483	B4	6622	E1	9535	C1
2348	E5	3487	C4	6624	E1	9536	C3
2350	G4	3490	C3	6625	E1	9549	C1
2354	F4	3502	A1	6630	D3	9554	C2
2355	E5	3503	A1	6640	D3	9600	E1
2365	F4	3504	A1	6641	D3	9601	D2
2366	F4	3513	A3	6661	E2	9602	D3
2367	E4	3516	A4	6666	D2	9603	D4
2369	F3	3520	B3	6675	D2	9612	E1
2370	E5	3537	C3	6707	G4	9619	D2
2453	C3	3538	C2	6709	B5	9656	E3
2456	D4	3539	B1	6861	A4	9658	E2
2458	C4	3541	C3	7240	C5	9667	E2
2465	C4	3543	C3	7303	G4	9680	E1
2466	C4	3545	C2	7305	F5	9693	D2
2468	C4	3546	A1	7306	F5	9697	D3
2469	C4	3548	C2	7307	F5	9699	D3
2471	D4	3549	C1	7308	G5	9700	G3
2473	D4	3550	C1	7309	F4	9701	F3
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2506	A3	3552	C2	7500	A2	9703	G3
2509	A2	3553	C2	7502	A1	9704	G2
2524	C1	3560	C2	7503	A2	9705	F3
2538	C3	3570	B2	7504	A5	9706	F2
2539	B3	3588	B2	7505	A5	9707	F2
2545	B1	3589	B1	7540	C3	9708	F2
2546	A1	3590	C3	7545	B1	9710	F2
2547	A1	3603	G1	7625	E1	9711	D4
2548	C2	3604	F1	7708	G2	9714	G3
2549	B1	3606	F1	7710	G2	9715	G2
2550	C1	3610	E1	8010	G1	9716	E3
2551	C2	3616	F2	9001	B5	9717	E3
2559	C2	3617	F1	9222	C3	9718	B4
2560	A3	3619	E1	9223	B4	9749	D4
2570	C2	3620	E1	9225	A4	9751	E3
2574	B3	3621	E1	9226	D4	9772	F2
2580	B3	3622	E1	9227	E5	9773	F3
2590	C3	3626	E1	9228	C5	9853	A3
2600	F1	3631	E3	9229	D4	9854	B4
2605	D1	3635	F2	9230	D4	9856	A3
2607	D1	3637	E2	9231	D4	9860	A4
2617	E1	3675	E2	9233	C5	9861	B4
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2625	E1	3682	E3	9235	D4	9881	B4
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2630	D3	3709	G3	9237	B3	9883	A3
2631	C2	3718	G3	9239	D5	9884	A3
2632	D3	3719	G3	9240	D5	M11	G1
2640	D3	3727	G3	9241	C5	M12	A3
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2652	D3	3732	E3	9250	B3	M16	F4
2653	D3	3733	E3	9251	B4	M18	D3
2660	E3	3734	E3	9252	A3	M19	G5
2672	F2	3736	F3	9253	B4	M20	G4
2675	D2	3737	F2	9300	E5	M21	B3
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2719	G2	3767	F3	9312	F4	M33	E1
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3001	A5	3772	F2	9317	E3	M37	E2
3002	B5	3779	G2	9318	G4	M38	E5
3003	B5	3794	F3	9321	F3	M40	G3
3009	B5	3850	A4	9322	E4	M50	B4
3010	B5	3855	B4	9323	F3	M51	D4
3203	C5	3856	A4	9325	G3	M53	D5
3207	C5	3860	A4	9326	F5	M55	F3
3208	D4	3862	A4	9327	F4	M56	B5
3209	D4	3865	A4	9328	E5	M60	F3
3222	D5	3867	A4	9330	D4	M67	F1
3228	C4	3887	F3	9331	F4	M69	F3
3240	C5	3888	A3	9332	D3	M70	D5
3241	D5	5001	B5	9333	G4	M71	B1
3246	G5	5240	D4	9334	G4	M84	D5
3247	G5	5242	D4	9335	G5	M90	C2
3248	G5	5301	E5	9336	E4	P01	B5
3249	G5	5303	F4	9337	E4	P02	D5
3250	A3	5306	G4	9338	E4	P03	A5
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3254	A3	5545	B2	9341	C4		
3306	E5	5549	C1	9342	F4		
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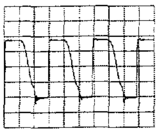
TP1 = DC 15V9

TP2 = DC -15V9

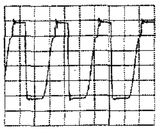
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

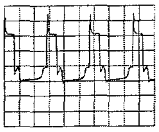


5V/div AC
5µs div

TP6 = DC 4V8

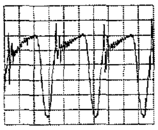
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



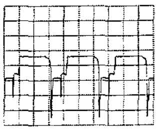
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

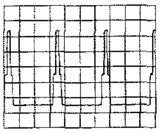
TP12 = DC 2V7

TP14



2V/div AC
20µs div

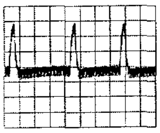
TP16



2V/div AC
20µs div

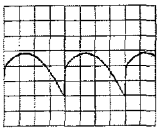
TP17 = DC 0V

TP18



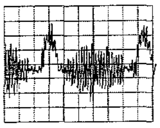
2V/div AC
5ms div

TP19



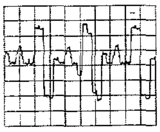
1V/div AC
5ms div

TP20



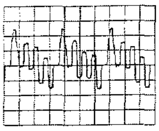
20mV/div AC
10µs div

TP21



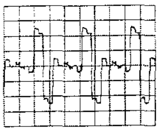
0.1V/div AC
20µs div

TP22



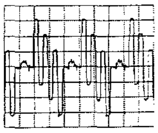
0.2V/div AC
20µs div

TP23



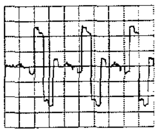
0.2V/div AC
20µs div

TP24



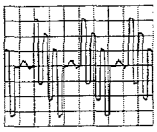
0.2V/div AC
20µs div

TP25



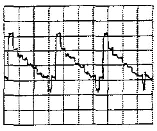
0.2V/div AC
20µs div

TP26



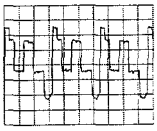
0.2V/div AC
20µs div

TP27



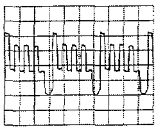
0.1V/div AC
20µs div

TP28



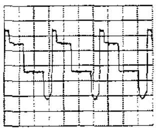
0.5V/div AC
20µs div

TP29



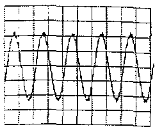
0.5V/div AC
20µs div

TP30



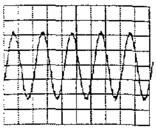
0.5V/div AC
20µs div

TP31



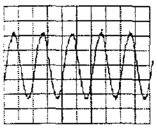
10mV/div AC
0.5ms div

TP32



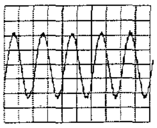
10mV/div AC
0.5ms div

TP33



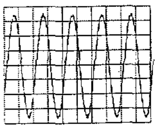
10mV/div AC
0.5ms div

TP34



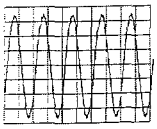
10mV/div AC
0.5ms div

TP35



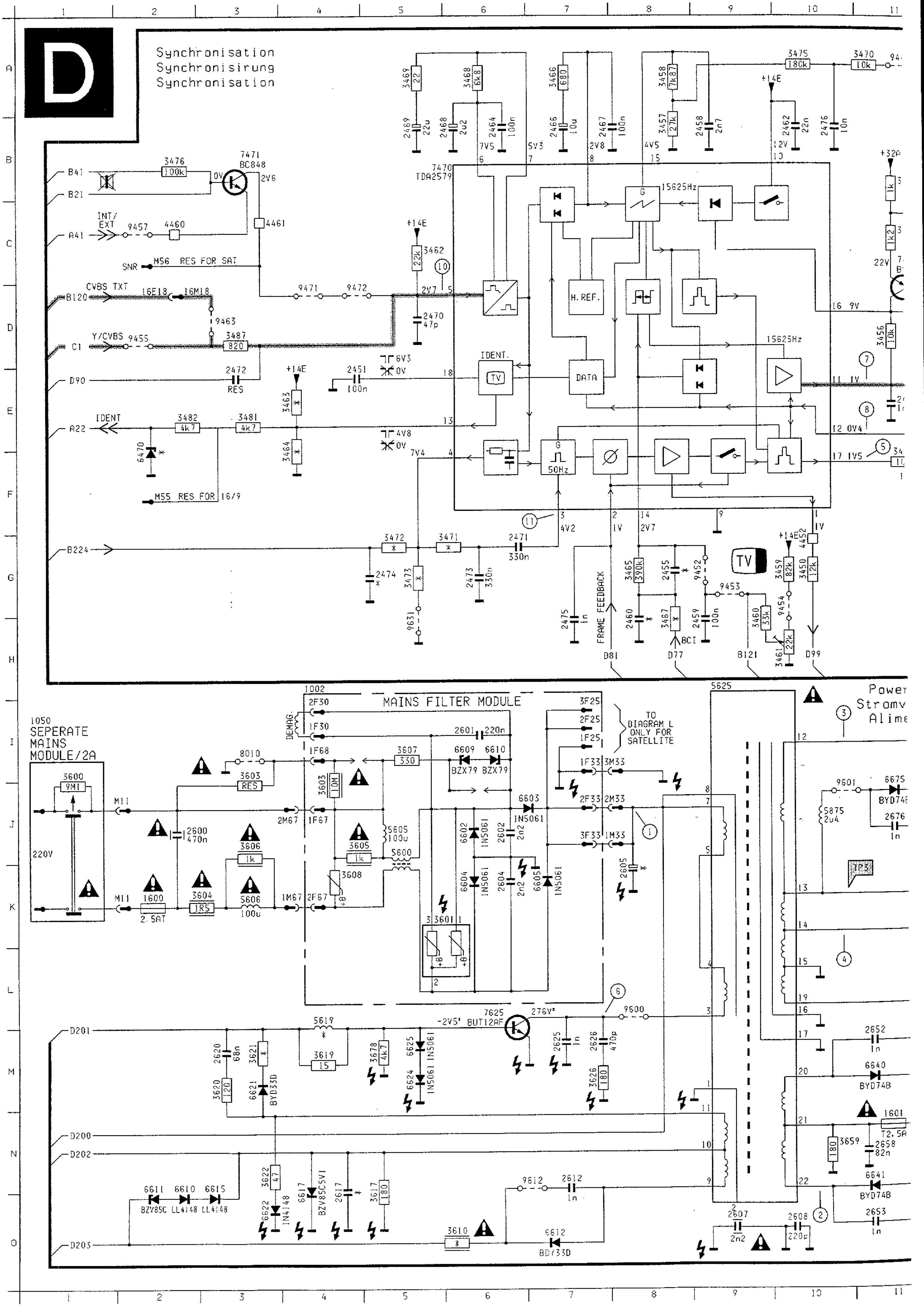
200mV/div AC
0.5ms div

TP36

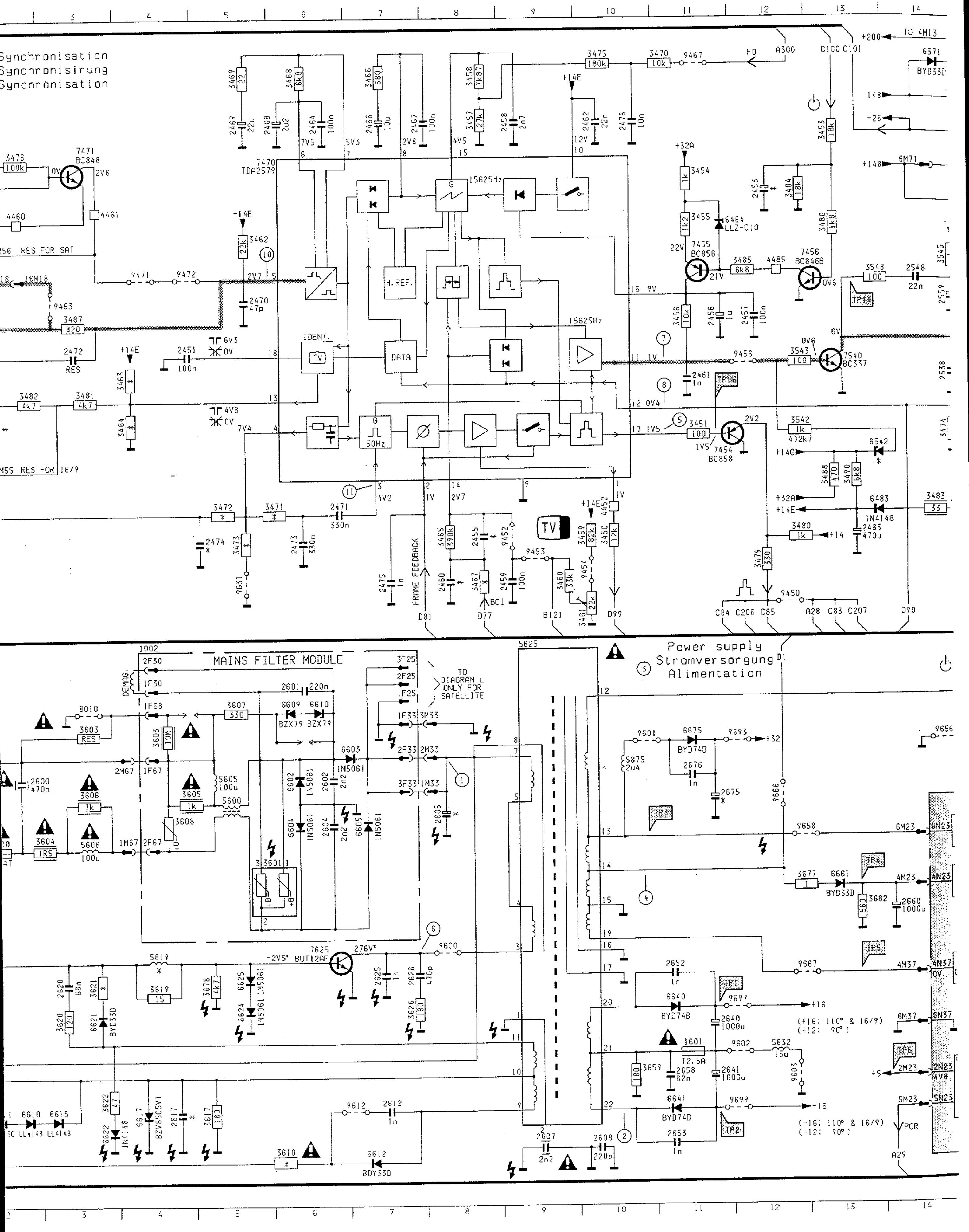


200mV/div AC
0.5ms div

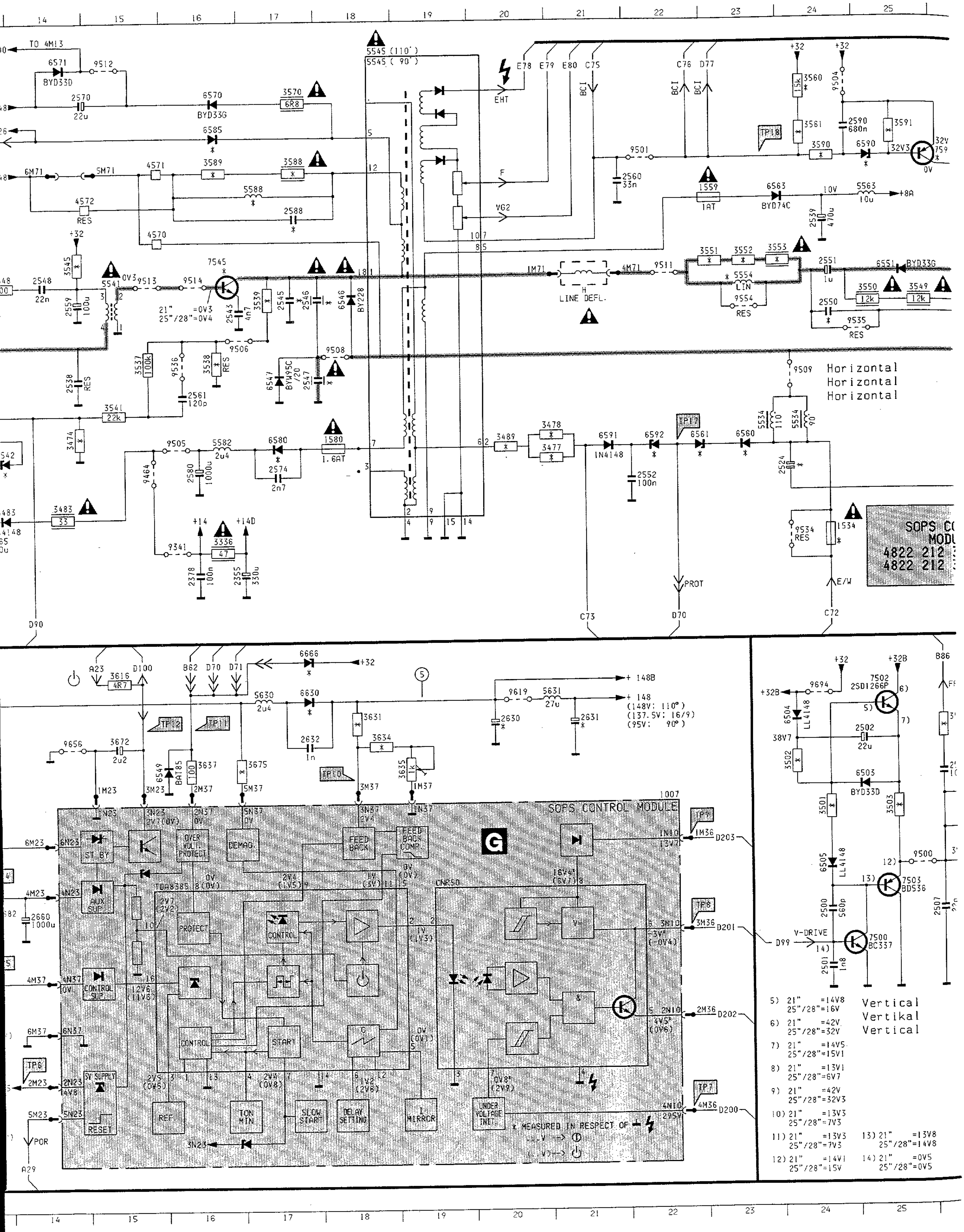
Power supply/Stromversorgung/Alimentation


D
Synchronisation
Synchronisierung
Synchronisation
7470
TDA2579
7471
BC848
15625Hz
H. REF.
IDENT.
DATA
50Hz
FRAME FEEDBACK
1002
MAINS FILTER MODULE
TO DIAGRAM L ONLY FOR SATELLITE
DEMAG.
1050
SEPERATE MAINS MODULE/2A
220V
3600
9M1
1600
2.5AT
5625
7625
BUT12AF
276V*
-2V5*
1601
T2.5A
Power
Stromv
Alime
B41
B21
A41
INT/EXT
SNR
M56 RES FOR SAT
CVBS TXT
B120
Y/CVBS
C1
D90
A22
IDENT
M55 RES FOR 16/9
B224
D81
D77
B121
D99
BCI
D201
D200
D202
D203
TP3

Power supply/Stromversorgung/Alimentation



Synchronisation
Synchronisierung
Synchronisation
7470
TDA2579
7471
BC848
3476
100k
4460
4461
RES FOR SAT
9471
9472
9463
3487
820
2472
RES
3482
4k7
3481
4k7
3463
3464
RES FOR 16/9
3469
22
2469
22u
3468
6k8
2468
2u2
2464
100n
3466
680
2466
10u
2467
100n
3458
7k87
3457
27k
2458
2n7
3475
180k
3470
10k
9467
FO
A300
C100 C101
+14E
2462
22n
2476
10n
3462
22k
2470
47p
2451
100n
IDENT.
TV
DATA
H. REF.
15625Hz
50Hz
3472
3471
2471
330n
2474
3473
2473
330n
9631
2475
1n
FRAME FEEDBACK
3465
390k
2455
2460
3467
BCI
2459
100n
9452
9453
3460
33k
3459
82k
3450
12k
4452
9454
3461
22k
D81
D77
B121
D99
+32A
3454
1k
3455
1k2
6464
LLZ-C10
7455
BC856
3485
6k8
4485
7456
BC846B
3456
10k
2456
1u
2457
100n
2461
1n
TP16
9456
3543
100
7540
BC337
3451
100
7454
BC858
3542
1k
4)2k7
6542
3488
470
3490
6k8
+32A
+14E
6483
1N4148
3483
33
2465
470u
3480
1k
+14
3479
330
9450
C84 C206 C85
A28 C83 C207
D90
+200
TO 4M13
6571
BYD33D
148
-26
3453
18k
+148
6M71
2453
3484
18k
3486
1k8
3548
100
2548
22n
TP14
2V7
2V8
4V5
7V5
5V3
12V
7V4
4V2
2V2
1V5
16 9V
11 1V
12 0V4
17 1V5
0V6
6V3
4V8
Power supply
Stromversorgung
Alimentation
1002
2F30
1F30
DEMAG.
MAINS FILTER MODULE
3F25
2F25
1F25
TO DIAGRAM L ONLY FOR SATELLITE
8010
1F68
3607
330
6609
6610
BZX79
BZX79
2601
220n
3603
RES
3603
10M
2600
470n
2M67
1F67
3606
1k
3605
1k
5605
100u
5600
3608
3604
1RS
5606
100u
1M67
2F67
3601
6602
1N5061
2602
2n2
6604
1N5061
2604
2n2
6605
1N5061
6603
1N5061
1F33
3M33
2F33
2M33
3F33
1M33
2605
5625
7625
BUT12AF
-2V5'
276V'
9600
2625
1n
2626
470p
3626
180
5619
3619
15
2620
68n
3621
3620
120
6621
BYD33D
3678
4k7
6625
1N5061
6624
1N5061
3622
47
6622
1N4148
6617
BZV85C5V1
2617
3617
180
6610
6615
LL4148
LL4148
9612
2612
1n
3610
6612
BDY33D
2607
2n2
2608
220p
9601
6675
BYD74B
9693
+32
5875
2u4
2676
1n
2675
TP3
9666
9658
6M23
6N23
3677
1
6661
BYD33D
3682
560
2660
1000u
TP4
4M23
4N23
9667
4M37
4N37
TP5
2652
1n
6640
BYD74B
TP1
9697
+16
2640
1000u
(+16: 110° & 16/9)
(+12: 90°)
6M37
6N37
1601
T2, 5A
9602
5632
15u
3659
180
2658
82n
2641
1000u
9603
TP6
2M23
2N23
4V8
+5
6641
BYD74B
9699
-16
(-16: 110° & 16/9)
(-12: 90°)
5M23
5N23
POR
A29
2653
1n
TP2
9656
D1


14
15
16
17
18
19
20
21
22
23
24
25
TO 4M13
6571
BYD33D
9512
2570
22u
6570
BYD33G
3570
6R8
6585
6M71
5M71
4571
3589
3588
5588
4572
RES
2588
4570
+32
3545
2548
22n
2559
100u
5541
0V3
9513
9514
7545
21" =0V3
25"/28"=0V4
2543
4n7
3539
2545
2546
6546
BY228
3537
100k
9536
3538
RES
9506
9508
6547
BYW95C /20
2547
2538
RES
2561
120p
3541
22k
3474
9505
5582
2u4
6580
1580
1.6AT
2580
1000u
2574
2n7
9464
3483
33
+14
+14D
3336
47
9341
2378
100n
2355
330u
D90
5545 (110°)
5545 (90°)
E78
E79
E80
C75
EHT
F
VG2
BCI
C76
D77
9501
2560
33n
1559
1AT
6563
BYD74C
10V
5563
10u
+8A
2539
470u
+32
3560
15k
9504
3561
TP18
2590
680n
3591
3590
6590
32V3
32V
7591
0V
IM71
4M71
9511
H
LINE DEFL.
3551
3552
3553
5554
LIN
9554
RES
2551
1u
6551
BYD33G
3550
12k
3549
12k
2550
9535
RES
9509
Horizontal
Horizontal
Horizontal
5534
110°
5534
90°
2524
3478
3489
3477
6591
1N4148
6592
TP17
6561
6560
2552
100n
9534
RES
1534
PROT
E/W
C73
D70
C72
SOPS CO
MODU
4822 212
4822 212
A23
3616
4R7
D100
B62
D70
D71
6666
+32
5
+ 148B
+ 148
(148V: 110°)
(137.5V: 16/9)
(95V: 90°)
5630
2u4
6630
9619
5631
27u
2630
2631
3631
2632
1n
3634
3635
1k
TP12
TP11
TP10
9656
3672
2u2
6549
BA185
3637
100
3675
1M23
3M23
2M37
5M37
3M37
1M37
1007
SOPS CONTROL MODULE
G
TP1
IN10
13V7
1M36
D203
6M23
6N23
ST BY
OVER VOLT PROTECT
DEMAG.
FEED BACK
FEED BACK COMP.
4M23
4N23
AUX SUP
TDA8385
CNR50
2660
1000u
PROTECT
CONTROL
TP8
3N10
3M36
D201
-3V
(-0V4)
4M37
4N37
CONTROL SUP.
2M36
D202
6M37
6N37
CONTROL
START
TP6
2M23
2N23
14V8
5V SUPPLY
5M23
5N23
RESET
POR
A29
REF.
TON MIN
SLOW START
DELAY SETTING
I MIRROR
UNDER VOLTAGE INHIT
TP7
4N10
295V
4M36
D200
3N23
* MEASURED IN RESPECT OF
+32
+32B
B86
+32B
9694
7502
2SD1266P
6504
LL4148
38V7
2502
22u
3502
6503
BYD33D
3501
3503
6505
LL4148
9500
7503
BD536
2500
560p
V-DRIVE
D99
7500
BC337
2501
1n8
2507

Horizontal
Horizontal
Horizontal

Vertical
Vertikal
Vertical

5) 21" =14V8
25"/28"=16V

6) 21" =42V
25"/28"=32V

7) 21" =14V5
25"/28"=15V1

8) 21" =13V1
25"/28"=6V7

9) 21" =42V
25"/28"=32V3

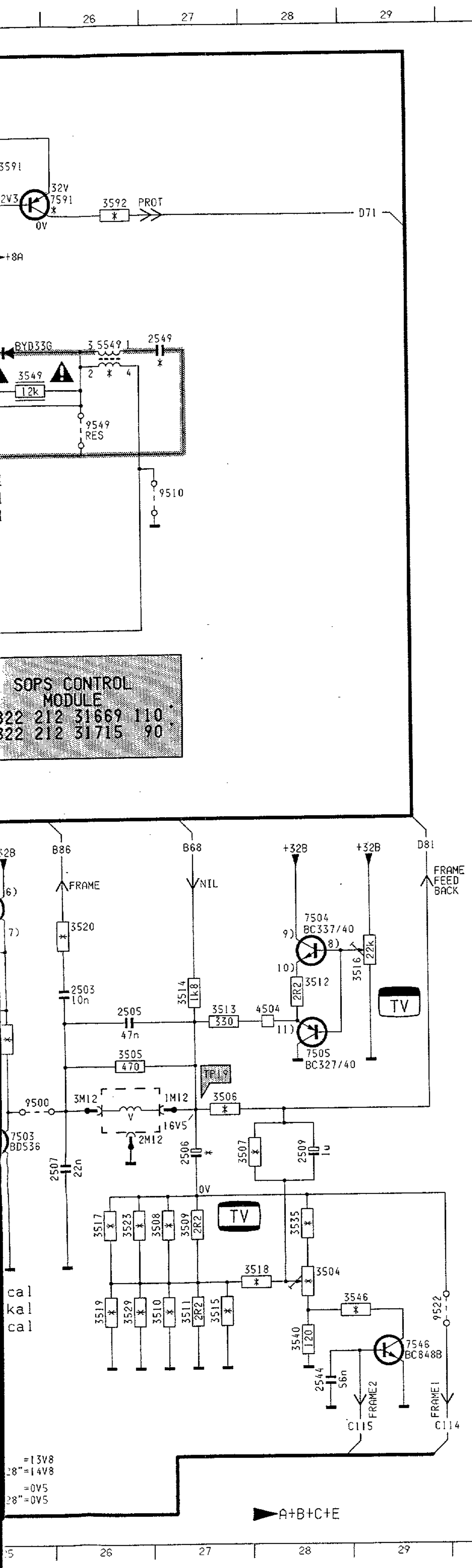
10) 21" =13V3
25"/28"=7V3

11) 21" =13V3
25"/28"=7V3

12) 21" =14V1
25"/28"=15V

13) 21" =13V8
25"/28"=14V8

14) 21" =0V5
25"/28"=0V5



30 31 32 33

D

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERaTEN
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) BLACK-LINE 16/9
4) 21"-110˚
5) 29"

*	1)	2)	3)	4)	5)
1534	315mA	-	315mA	315mA	315mA
2453	22u	22u	22u	22u	22u
2455	1n	1n	3n3	560p	3n3
2460	2n7	10n	10n	1n5	3n3
2474	-	-	100n	-	-
2506	1000u	1000u	2200u	1000u	1000u
2524	-	4u7	-	-	-
2545	1n5	1n2	1n5	1n2	1n5
2546	11n	13n	12n	7n5	13n
2547	27n	47n	22n	22n	27n
2549	470n	-	470n	470n	470n
2550	390n	680n	-	330n	680n
2588	JMP	RES	470p	-	-
2605	220u	150u	220u	220u	220u
2617	1u	470n	1u	1n	1u
2630	100u	47u	100u	100u	100u
2631	100u	47u	100u	100u	100u
2662	270p	220p	270p	-	270p
2663	82p	100p	82p	-	82p
2675	1000u	680u	1000u	100u	1000u
3463	18k	18k	3k3	18k	18k
3464	12k	12k	-	12k	12k
3467	2M7	3M3	2M2	3M9	2M7
3471	120k	470k	120k	270k	270
3472	-	-	820k	-	-
3473	270k	270k	330k	270k	270k
3474	5k6	5k6	2k7	5k6	5k6
3477	2R2	0R5	-	0R5	0R5
3478	4R7	0R5	-	0R5	0R5
3489	0R5	1R	-	0R5	0R5
3501	22	27	27	22	22
3502	1k2	2k7	1k2	1k2	1k2
3503	1R2	4R7	1R2	1R2	1R5
3504	100	100	-	100	100
3506	330k	330k	270k	330k	470k
3507	22k	27k	22k	27k	33k
3508	2R2	2R2	-	-	2R2
3510	2R2	2R2	2R2	-	2R2
3515	2R2	2R2	-	2R2	2R2
3517	2R2	-	2R2	2R2	2R2
3518	-	-	10	-	-
3519	2R2	-	2R2	2R2	2R2
3520	4k7	4k7	-	4k7	4k7
3523	2R2	1n	2R2	1n	2R2
3529	2R2	-	2R2	1n	2R2
3535	120	150	-	120	120
3539	470k	470k	470k	470k	470k
3542	1k	2k7	-	1k	1k
3545	180	330	180	330	220
3546	180	120	-	150	180
3551	560	560	-	560	560
3552	560	560	-	560	560
3553	560	560	-	560	560
3560	15k	33k	15k	15k	15k
3561	2k2	3k3	5k6	12k	2k2
3588	-	27	560	27	-
3589	-	27	1k5	27	-
3590	330k	-	100k	330k	330k
3591	6k8	-	6k8	6k8	6k8
3592	680	-	680	680	680
3610	8R2	6R8	8R2	8R2	8R2
3621	27	56	27	27	27
3631	220k	120k	220k	220k	220k
3634	3k3	2k7	3k3	3k3	3k3
3675	120k	47k	120k	120k	120k
5549	100u	-	100u	100u	100u
5554	COIL LC90	AT4042/ 97	-	AT4042/ 97	COIL LC90
5588	100u	22u	100u	22u	100u
5619	3u9	4u7	3u9	3u9	3u9
6642	BZX79/ C15	BZX79/ C22	-	BZX79/ C15	BZX79/ C15
6560	LL4148	-	LL4148	LL4148	LL4148
6561	BZX79/ C68	-	BZX79/ C68	BZX79/ C68	BZX79/ C68
6580	BYV28-200/20	BYV28-200	BYU29F	BYV28-200/20	BYV28-200
6585	BYD33G	-	BYD33G	BYD33G	BYD33G
6590	LLZ/C33	-	LLZ/C33	LLZ/C33	LLZ/C33
6592	LLZ/C27	LLZ/C27	-	LLZ/C27	LLZ/C22
6630	BY229F-600	BYD74G	BY229F-600	BY229F-600	BY229F-600
6666	LLZ/C36	LLZ/C43	LLZ/C36	LLZ/C36	LLZ/C36
6470	-	-	LLZ/CW8	-	-
7575	BU508AF	BU508AF	BU508AF	BU508AF	BU2520AF
7591	BC858B	-	BC858B	BC858B	BC858B

1002	H 4	3481	E 3	6542	F13
1007	J22	3482	E 2	6546	D19
1050	I 1	3483	G14	6547	E17
1534	G24	3484	C12	6549	J15
1559	C23	3485	C12	6551	D25
1580	F18	3486	C13	6560	F23
1600	K 2	3487	D 3	6561	F22
1601	N11	3488	F13	6563	C24
2355	G16	3489	F20	6570	A16
2378	G16	3490	F13	6571	A14
2451	E 4	3501	K24	6580	F17
2453	C12	3502	J24	6585	B16
2455	G 8	3503	K25	6590	B25
2456	D11	3504	M28	6591	F21
2457	D12	3505	K26	6592	F22
2458	B 9	3506	K27	6602	J 6
2459	H 9	3507	L27	6603	J 7
2460	H 8	3508	L27	6604	K 6
2461	E11	3509	L27	6605	K 7
2462	B10	3510	M27	6610	N 2
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2465	G13	3512	J28	6612	O 7
2466	B 7	3513	J27	6615	N 3
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2472	E 3	3519	M26	6630	I17
2473	G 6	3520	I26	6640	M11
2474	G 5	3523	L26	6641	N11
2475	H 7	3529	M26	6661	K13
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2500	L24	3537	E15	6675	J11
2501	M24	3538	E16	7454	F12
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2506	L27	3542	F12	7471	B 3
2507	L26	3543	E12	7500	L25
2509	L28	3545	C14	7502	I25
2524	F24	3546	M29	7503	L25
2538	E14	3548	D13	7504	I28
2539	C24	3549	D25	7505	K28
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2545	D17	3552	C23	7546	N29
2546	D17	3553	C24	7591	B26
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2570	A14	3601	K 5	9457	C 2
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2588	C17	3604	K 3	9467	A11
2590	B24	3605	J 4	9471	D 4
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2617	N 4	3621	M 3	9510	E27
2620	M 3	3622	N 3	9511	D22
2625	M 7	3626	M 7	9512	A15
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2653	O11	3677	K12	9554	D23
2658	N11	3678	M 5	9600	L 8
2660	L14	3682	L13	9601	J10
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2676	J11	4460	C 2	9603	N12
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3454	B11	4571	B15	9658	K12
3455	C11	4572	C15	9666	J12
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3458	A 8	5541	D15	9694	I24
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3463	E 4	5563	C25		
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3476	B 2	6470	F 2		
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3478	F21	6503	J25		
3479	G12	6504	I24		
3480	G12	6505	K24		

A B C D E F G H I J K L M N O

CHASSIS GR2.4

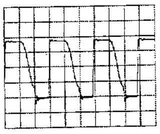
CL46532061/016.DPAR
181094

30 31 32 33

TP1 = DC 15V9

TP2 = DC -15V9

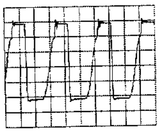
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

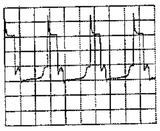


5V/div AC
5µs div

TP6 = DC 4V8

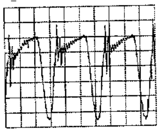
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



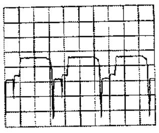
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

TP12 = DC 2V7

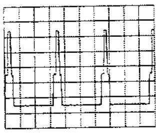
TP14



2V/div AC
20µs div

TP15 = DC 13V4

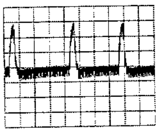
TP16



2V/div AC
20µs div

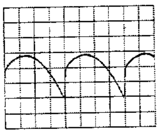
TP17 = DC 0V

TP18



2V/div AC
5ms div

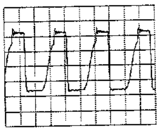
TP19



1V/div AC
5ms div

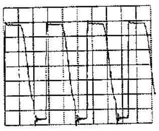
① = DC 298V

②



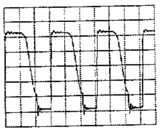
10V/div AC
5µs div

③



50V/div AC
5µs div

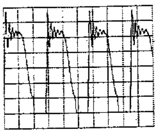
④



5V/div AC
5µs div

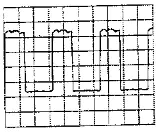
(5a) = DC 144V

⑥



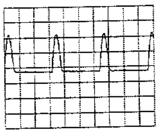
100V/div AC
5µs div

⑦



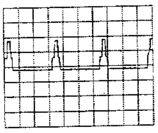
0.5V/div AC
20µs div

⑧



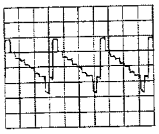
1V/div AC
20µs div

⑨

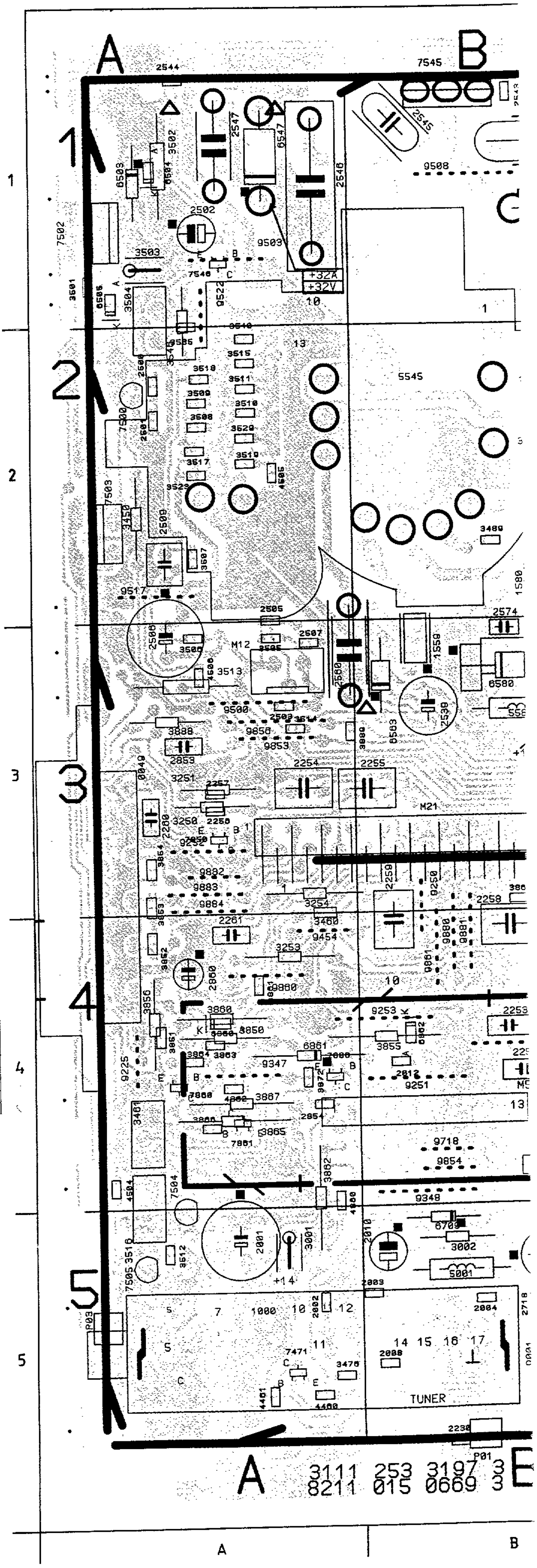


5V/div AC
20µs div

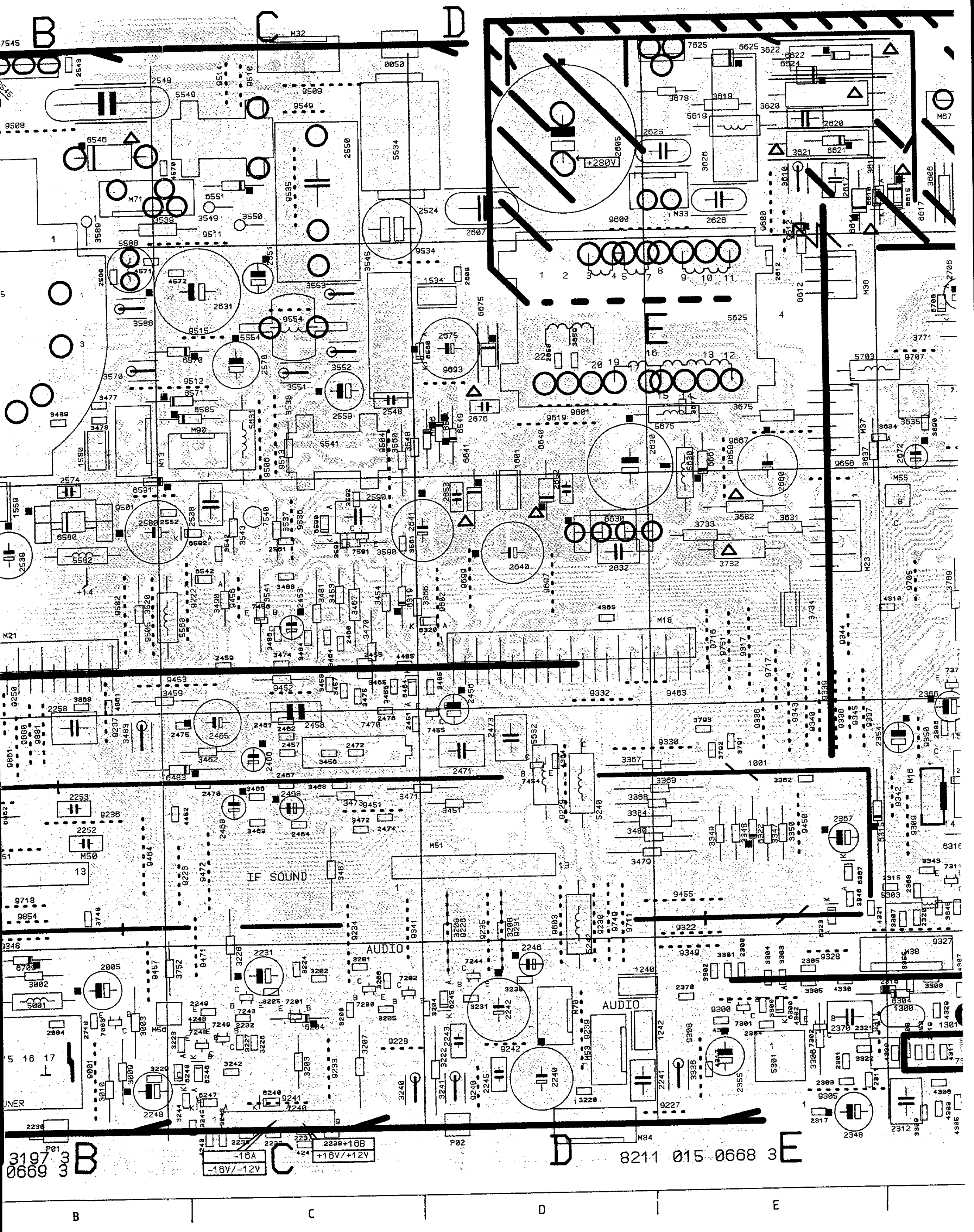
⑩



0.5V/div AC
20µs div



Mono carrier / Hauptplatine / Châssis


B
C
D
E
M32
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+280V
2605
M33
9600
2626
2625
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2550
2524
2607
M67
M38
M37
M23
M55
M16
M18
M21
M13
M90
M71
M50
M51
M56
M70
M84
1 2 3 4 5 7 8 9 10 11
22 20 19 17 16 15 14 13 12
5625
5675
3675
2630
2660
2632
2640
2641
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2631
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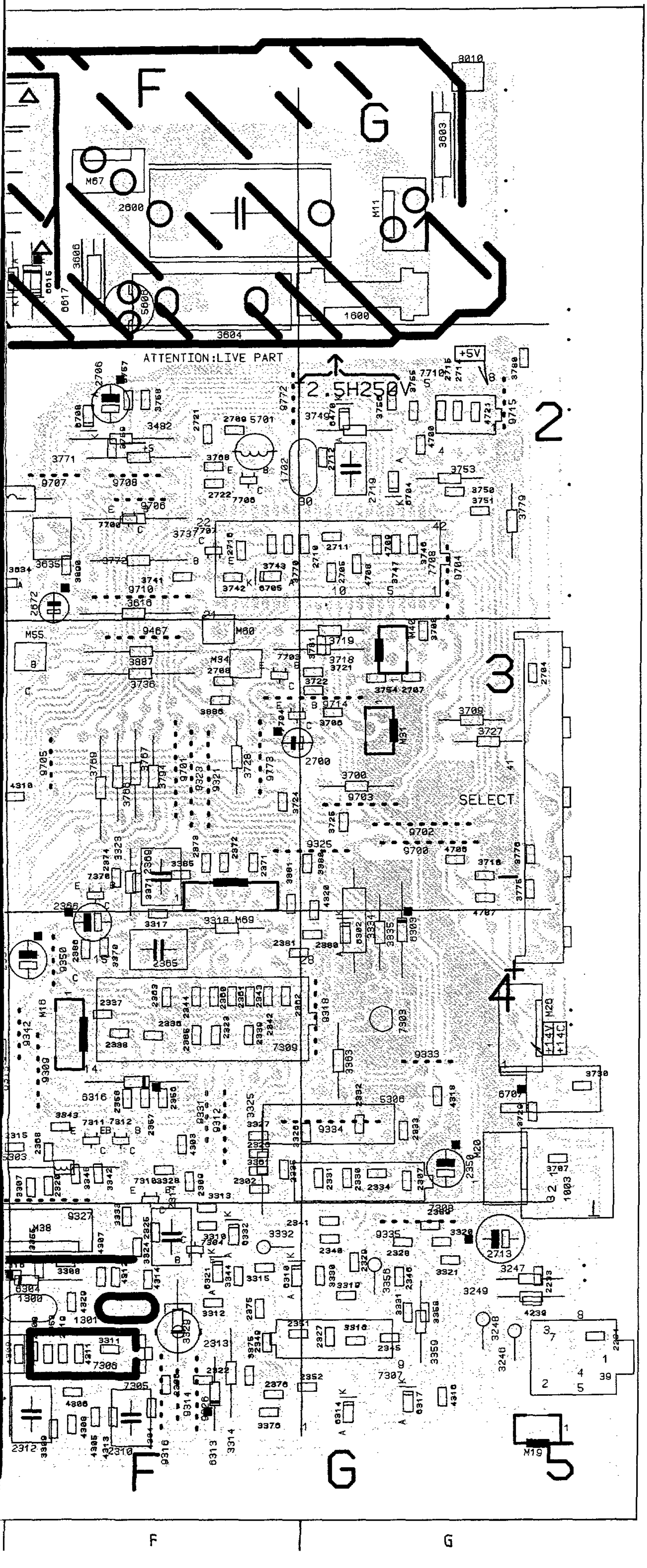
2530
2559
2570
2485
2465
2231
2242
2240
2248
2205
2246
2367
2355
2348
2312
2370
IF SOUND
AUDIO
AUDIO
5 16 17
UNER
P01
P02
-16A
-16V/-12V
2238+16B
+16V/+12V
3197 3
0669 3
8211 015 0668 3
B
C
D
E



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1000	A5
1003	G4
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1242	D5
1300	F5
1301	F5
1534	D2
1559	B3
1580	B2
1600	G1
1601	D3
1702	G2
2001	A5
2003	B5
2004	B5
2005	B5
2008	B5
2010	B5
2012	B4
2230	B5
2231	C5
2232	C5
2233	G5
2234	G5
2236	C5
2237	C5
2238	C5
2239	C5
2240	D5
2241	D5
2242	D5
2243	D5
2245	D5
2246	D5
2248	B5
2249	C5
2252	B4
2253	B4
2254	A3
2255	B3
2256	A3
2257	A3
2258	B4
2259	B4
2260	A3
2261	A4
2300	E5
2301	E5
2302	F4
2303	E5
2304	E5
2305	E5
2306	F5
2307	G4
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2309	F4
2310	F5
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2313	F5
2314	F5
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2323	F4
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4308	F5
4309	F5
4310	F3
4311	F5
4312	F5
4313	F5
4314	F5
4316	G5
4317	E5
4318	G4
4320	G4
4321	E4
4329	F5
4330	E5
4364	D4
4365	D3
4452	B4
4460	A5
4461	A5
4485	C3
4502	@5
4504	A4
4505	A2
4506	A3
4570	B1
4571	B2
4572	B2
4700	G2
4706	G3
4707	G3
4708	G2
4709	G2
4721	G2
4860	A4
4861	B3
4862	A4
4901	@2
4902	@2
5001	B5
5240	D4
5242	D4
5301	E5
5303	F4
5306	G4
5534	D1
5541	C2
5545	B2
5549	C1
5554	C2
5563	B3
5582	B3
5588	B2
5606	F1
5619	E1
5625	D2
5630	E3
5631	C2
5632	D4
5675	E2
5701	F2
5703	E2
6204	C5
6240	C5
6245	D5
6246	C5
6247	C5
6248	B5
6300	E5
6302	G4
6303	G4
6304	F5
6310	F5
6313	F5
6314	G5
6315	E4
6316	F4
6317	G5
6319	C3
6320	D3
6321	F5
6322	E4
6323	E4
6332	F5
6367	E4
6464	C3
6470	G2
6483	B4
6503	A1
6504	A1
6505	A1
6542	C3
6546	B1
6547	A1
6549	D2
6551	C1
6560*	D2
6561	D2
6563	B3
6570	B2
6571	B2
6580	B3
6585	C2
6590	C3
6591	B2
6592	C3
6610	E1
6611	E1
6612	E2
6615	F1
6617	F1
6621	E1
6622	E1
6624	E1
6625	E1
6630	D3
6640	D3
6641	D3
6661	E2
6666	D2
6675	D2
6704	G2
6705	F2
6707	G4
6708	F2
6709	B5
6860	A4
6861	A4
6862	B4
7003	B5
7200	C5
7201	C5
7202	C5
7240	C5
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7244	D5
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7301	E5
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7305	F5
7306	F5
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7309	F4
7310	F4
7311	F4
7312	F4
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7454	D4
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7456	C3
7470	C4
7471	A5
7500	A2
7502	A1
7503	A2
7504	A5
7505	A5
7540	C3
7545	B1
7546	A1
7591	C3
7625	E1
7700	F2
7703	F3
7704	F3
7706	F2
7707	F2
7708	G2
7710	G2
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7860	A4
7861	A4
7886	A4
8010	G1
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9230	D4
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9234	C5
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9236	B4
9237	B3
9239	D5
9240	D5
9241	C5
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9250	B3
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9338	E4
9339	E4
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9455	E4
9456	C3
9457	B5
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9467	F3
9471	C5
9472	C4
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9501	B3
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9503	A1
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9505	B3
9506	C2
9508	B1
9509	C1
9510	C1
9511	C1
9512	B2
9513	C2
9514	C1
9515	C2
9517	A2
9522	A1
9534	D2
9535	C1
9536	C3
9549	C1
9554	C2
9600	E1
9601	D2
9602	D3
9603	D4
9612	E1
9619	D2
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9717	E3
9718	B4
9749	D4
9751	E3
9772	F2
9773	F3
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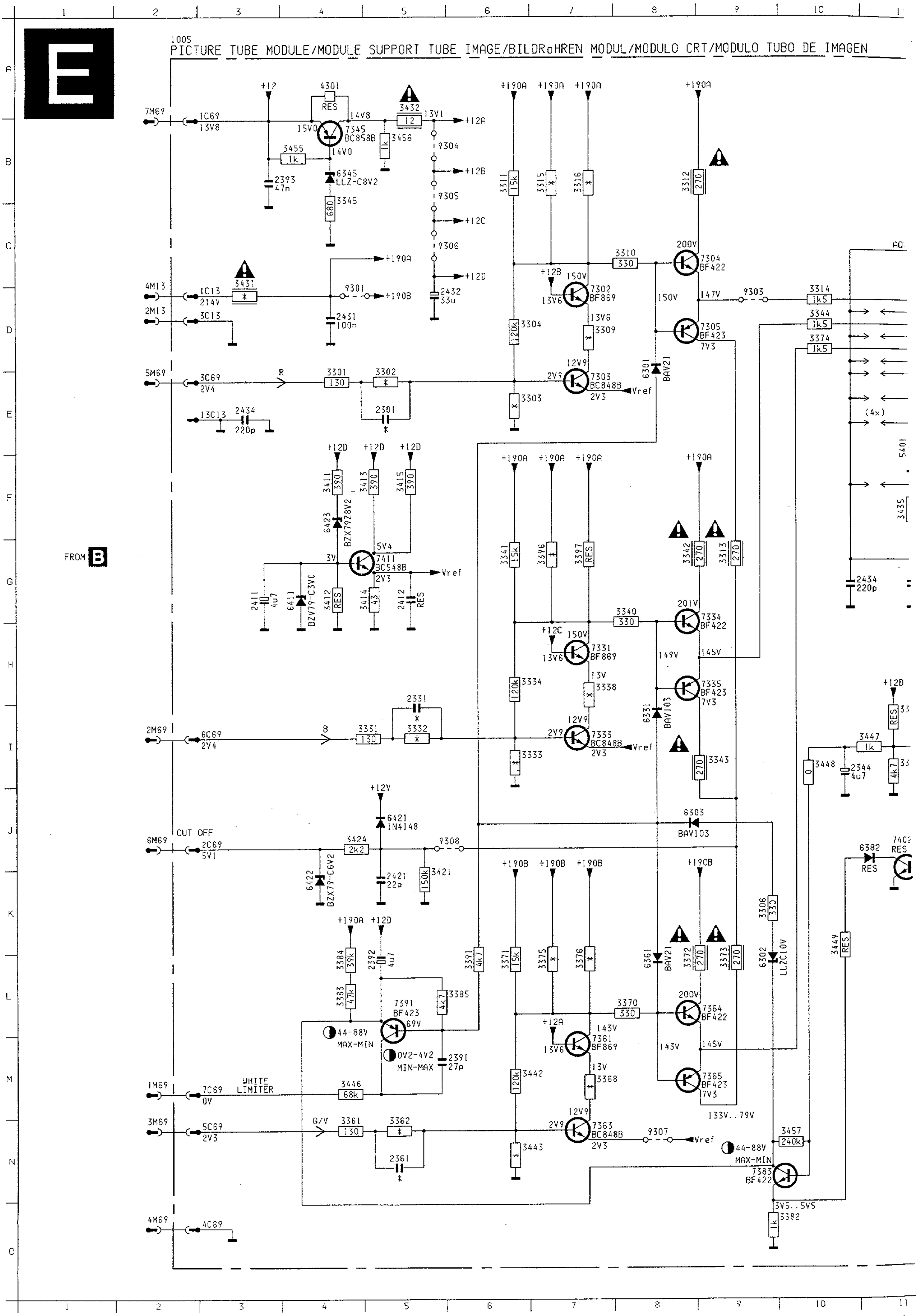
9854	B4
9856	A3
9860	A4
9861	B4
9880	B4
9881	B4
9882	A3
9883	A3
9884	A3
M11	G1
M12	A3
M13	B2
M16	F4
M18	D3
M19	G5
M20	G4
M21	B3
M23	E3
M26	G4
M31	G3
M32	C1
M33	E1
M34	F3
M36	E2
M37	E2
M38	E5
M40	G3
M50	B4
M51	D4
M53	D5
M55	F3
M56	B5
M60	F3
M67	F1
M69	F3
M70	D5
M71	B1
M84	D5
M90	C2
P01	B5
P02	D5
P03	A5

Picture tube panel/Bildröhren platte/Platine TRC


E
1005
PICTURE TUBE MODULE/MODULE SUPPORT TUBE IMAGE/BILDRoHREN MODUL/MODULO CRT/MODULO TUBO DE IMAGEN
FROM B
7M69
1C69
13V8
4M13
1C13
214V
2M13
3C13
5M69
3C69
2V4
13C13
2434
220p
2M69
6C69
2V4
6M69
CUT OFF
2C69
5V1
1M69
7C69
0V
WHITE LIMITER
3M69
5C69
2V3
4M69
4C69
+12
4301
RES
15V0
7345
BC858B
14V8
14V0
3432
12
13V1
+12A
3456
1k
3455
1k
2393
47n
6345
LLZ-C8V2
680
3345
9304
+12B
9305
+12C
9306
+12D
2432
33u
+190A
9301
+190B
3431
2431
100n
R
3301
130
3302
2301
+190A
3311
15k
3315
3316
3310
330
+12B
150V
13V6
7302
BF869
3304
120k
3309
12V9
2V9
7303
BC848B
2V3
Vref
3303
3312
270
200V
7304
BF422
150V
147V
9303
3314
1k5
3344
1k5
3374
1k5
7305
BF423
7V3
6301
BAV21
(4x)
5401
3435
2434
220p
+12D
3411
390
3413
390
3415
390
6423
BZX79Z8V2
5V4
3V
7411
BC548B
2V3
Vref
2411
4u7
6411
BZV79-C3V0
3412
RES
3414
43
2412
RES
3341
15k
3396
3397
RES
3342
270
3313
270
3340
330
201V
7334
BF422
+12C
150V
13V6
7331
BF869
149V
145V
3334
120k
13V
3338
7335
BF423
7V3
6331
BAV103
G
2331
3331
130
3332
12V9
2V9
7333
BC848B
2V3
Vref
3333
3343
270
+12V
6421
1N4148
3424
2k2
9308
6422
BZX79-C6V2
2421
22p
3421
150k
6303
BAV103
+190B
3371
15k
3375
3376
6361
BAV21
3372
270
3373
270
6302
LLZC10V
3306
330
3449
RES
+190A
+12D
3384
39k
2392
4u7
3383
47k
3385
4k7
3391
4k7
7391
BF423
69V
44-88V
MAX-MIN
0V2-4V2
MIN-MAX
2391
27p
3446
68k
3370
330
200V
7364
BF422
+12A
143V
13V6
7361
BF869
143V
145V
3442
120k
13V
3368
7365
BF423
7V3
133V..79V
G/V
3361
130
3362
2361
12V9
2V9
7363
BC848B
2V3
9307
Vref
3443
3457
240k
44-88V
MAX-MIN
7383
BF422
3V5..5V5
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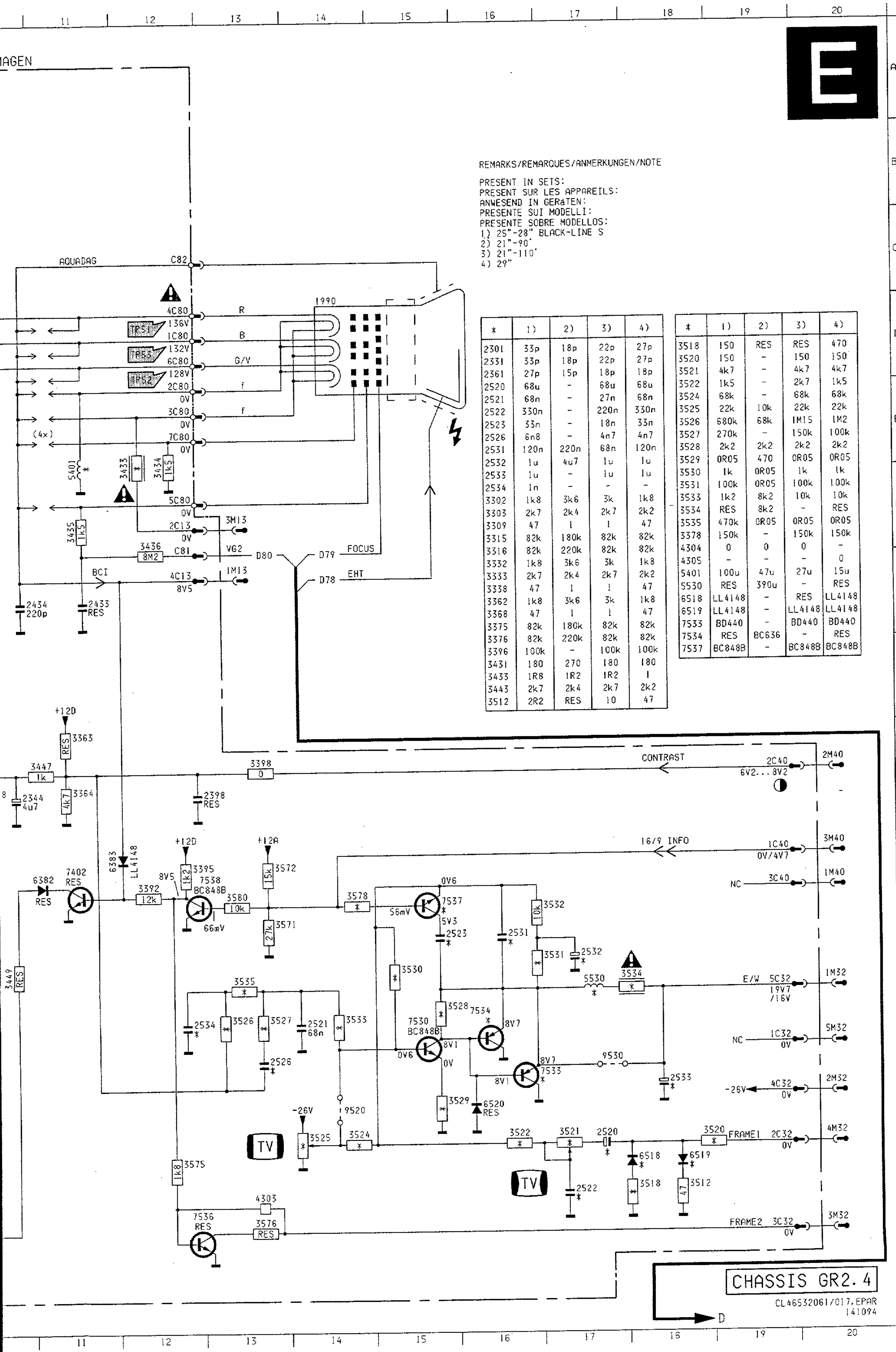
1k
+12D
3447
1k
3448
0
2344
4u7
4k7
6382
RES
7402
RES


E
AGEN
AQUADAG
C82
4C80
136V
1C80
132V
6C80
128V
2C80
0V
3C80
0V
7C80
0V
5C80
0V
2C13
0V
3M13
C81
VG2
D80
D79
FOCUS
D78
EHT
4C13
8V5
1M13
BCI
R
B
G/V
F
F
1990
TPS1
TPS3
TPS2
(4x)
5401
3433
3434
1k5
3435
1k5
3436
8M2
2434
220p
2433
RES
+12D
3363
RES
3447
1k
3364
4k7
2344
4u7
3398
0
2398
RES
CONTRAST
2C40
6V2...8V2
2M40
16/9 INFO
1C40
0V/4V7
3M40
NC
3C40
1M40
6383
LL4148
6382
RES
7402
RES
3392
12k
8V5
3395
1k2
7538
BC848B
66mV
3580
10k
+12A
3572
15k
3571
27k
3578
56mV
7537
5V3
0V6
2523
2531
3532
10k
3531
2532
3530
5530
3534
E/W
5C32
19V7
/16V
1M32
3535
2534
3526
3527
2521
68n
3533
2526
3528
7534
8V7
7530
BC848B
0V6
8V1
0V
8V7
7533
8V1
9530
2533
NC
1C32
0V
5M32
-26V
4C32
0V
2M32
3529
6520
RES
9520
-26V
3525
3524
TV
3522
3521
2520
3520
FRAME1
2C32
0V
4M32
6518
6519
2522
3518
3512
47
3449
RES
3575
1k8
4303
7536
RES
3576
RES
FRAME2
3C32
0V
3M32
CHASSIS GR2.4
CL46532061/017.EPAR
141094
D
11
12
13
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16
17
18
19
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A
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C
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H
I
J
K
L
M
N
O

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) 21"-110˚
4) 29"

*	1)	2)	3)	4)
2301	33p	18p	22p	27p
2331	33p	18p	22p	27p
2361	27p	15p	18p	18p
2520	68u	-	68u	68u
2521	68n	-	27n	68n
2522	330n	-	220n	330n
2523	33n	-	18n	33n
2526	6n8	-	4n7	4n7
2531	120n	220n	68n	120n
2532	1u	4u7	1u	1u
2533	1u	-	1u	1u
2534	1n	-	-	-
3302	1k8	3k6	3k	1k8
3303	2k7	2k4	2k7	2k2
3309	47	1	1	47
3315	82k	180k	82k	82k
3316	82k	220k	82k	82k
3332	1k8	3k6	3k	1k8
3333	2k7	2k4	2k7	2k2
3338	47	1	1	47
3362	1k8	3k6	3k	1k8
3368	47	1	1	47
3375	82k	180k	82k	82k
3376	82k	220k	82k	82k
3396	100k	-	100k	100k
3431	180	270	180	180
3433	1R8	1R2	1R2	1
3443	2k7	2k4	2k7	2k2
3512	2R2	RES	10	47

*	1)	2)	3)	4)
3518	150	RES	RES	470
3520	150	-	150	150
3521	4k7	-	4k7	4k7
3522	1k5	-	2k7	1k5
3524	68k	-	68k	68k
3525	22k	10k	22k	22k
3526	680k	68k	1M15	1M2
3527	270k	-	150k	100k
3528	2k2	2k2	2k2	2k2
3529	0R05	470	0R05	0R05
3530	1k	0R05	1k	1k
3531	100k	0R05	100k	100k
3533	1k2	8k2	10k	10k
3534	RES	8k2	-	RES
3535	470k	0R05	0R05	0R05
3378	150k	-	150k	150k
4304	0	0	0	-
4305	-	-	-	0
5401	100u	47u	27u	15u
5530	RES	390u	-	RES
6518	LL4148	-	RES	LL4148
6519	LL4148	-	LL4148	LL4148
7533	BD440	-	BD440	BD440
7534	RES	BC636	-	RES
7537	BC848B	-	BC848B	BC848B

1005	A 2
1990	D14
2301	E 5
2331	H 5
2344	I10
2361	N 5
2391	M 5
2392	L 5
2393	B 3
2398	I13
2411	G 3
2412	G 5
2421	K 5
2431	D 4
2432	D 5
2433	G12
2434	E 3
2434	G11
2520	M17
2521	L14
2522	N17
2523	K15
2526	M13
2531	K16
2532	K17
2534	L12
3301	E 4
3302	E 5
3303	E 6
3304	D 6
3306	K 9
3309	D 7
3310	C 8
3311	B 6
3312	B 8
3313	G 9
3314	D10
3315	B 7
3316	B 7
3331	I 5
3332	I 5
3333	I 6
3334	H 6
3338	H 7
3340	G 8
3341	G 6
3342	G 8
3343	I 9
3344	D10
3345	B 4
3361	N 4
3362	N 5
3363	I11
3364	I11
3368	M 7
3370	L 8
3371	L 6
3372	L 8
3373	L 9
3374	D10
3375	L 7
3376	L 7
3382	O 9
3383	L 4
3384	L 4
3385	L 6
3391	L 6
3392	J12
3395	J12
3396	G 7
3397	G 7
3398	I13
3411	F 4
3412	G 4
3413	F 5
3414	G 5
3415	F 5
3421	J 5
3424	J 4
3431	D 3
3432	A 5
3433	E12
3434	E12
3435	F11
3436	F12
3442	M 6
3443	N 6
3446	M 4
3447	I11
3448	I10
3449	K10
3455	B 4
3456	B 5
3457	N10
3512	N18
3518	N18
3520	M18
3521	M17
3522	M16
3524	M14
3525	M14
3526	L13
3527	L13
3528	L15
3529	M15
3530	K15
3531	K17
3532	K17
3533	L14
3534	L18
3535	L13
3571	K13
3572	J13
3575	N12
3576	N13
3578	K14
3580	K13
4301	A 4
4303	N13
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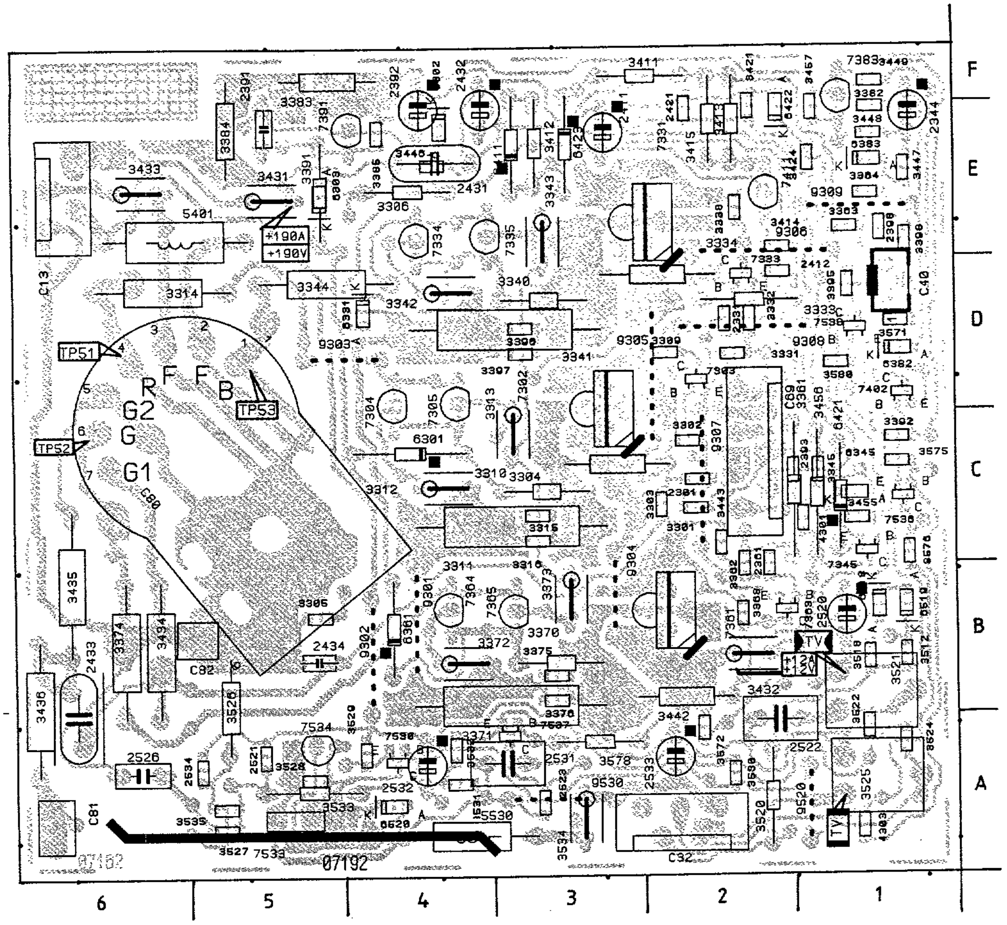
6301	D 8
6302	L 9
6303	J 8
6331	I 8
6345	B 4
6361	L 8
6382	J11
6383	J11
6411	G 4
6421	J 5
6422	K 4
6423	F 4
6518	N18
6519	N18
6520	M16
7302	D 7
7303	E 7
7304	C 9
7305	D 9
7331	H 7
7333	I 7
7334	H 9
7335	H 9
7345	B 4
7361	M 7
7363	N 7
7364	L 9
7365	M 9
7383	N 9
7391	L 5
7402	J11
7411	G 5
7530	L15
7533	M16
7534	L16
7536	N12
7537	K15
7538	J12
9301	D 4
9301	O 3
9303	D 9
9304	B 5
9305	B 5
9306	C 5
9307	N 8
9308	J 5
9309	O 3
9530	L17

1005 PICTURE TUBE MODULE


F
E
D
C
B
A
6
5
4
3
2
1
TP51
TP52
TP53
R
G2
G
G1
F
F
B
+190A
+190V
TV
+12V
07192

2301	C2	3372	B4	3575	C1	C13	E6
2331	D2	3373	B3	3576	C1	C32	A2
2344	E1	3374	B6	3578	A3	C40	D1
2361	C2	3375	B3	3580	D1	C69	C2
2391	E5	3376	B3	4301	C1	C80	C5
2392	E4	3382	E1	4303	A1	C81	A6
2393	C1	3383	F5	5401	E6	C82	B5
2398	E1	3384	E5	6301	C4		
2411	E3	3385	E4	6302	E4		
2412	D2	3391	E5	6303	E5		
2421	E2	3392	C1	6331	D4		
2431	E4	3395	D1	6345	C1		
2432	E4	3396	D3	6361	B4		
2433	B6	3397	D3	6382	D1		
2434	B5	3398	E1	6383	E1		
2520	B1	3411	F2	6411	E3		
2521	A5	3412	E3	6421	C1		
2522	A2	3413	E2	6422	E2		
2523	A3	3414	E2	6423	E3		
2526	A6	3415	E2	6518	B1		
2531	A3	3421	F2	6519	B1		
2532	A4	3424	E1	6520	A4		
2533	A2	3431	E5	7302	D3		
2534	A5	3432	B2	7303	D2		
3301	C2	3433	E6	7304	D4		
3302	C2	3434	B6	7305	D4		
3303	C2	3435	B6	7331	E2		
3304	C3	3436	B6	7333	D2		
3305	B5	3442	B2	7334	E4		
3306	E4	3443	C2	7335	E3		
3309	D2	3446	E4	7345	C1		
3310	C3	3447	E1	7361	B2		
3311	C3	3448	E1	7363	B2		
3312	C4	3449	F1	7364	B4		
3313	C3	3455	C1	7365	B3		
3314	D6	3456	C1	7383	F1		
3315	C3	3457	E1	7391	E4		
3316	C3	3512	B1	7402	D1		
3331	D2	3518	B1	7411	E2		
3332	D2	3520	A2	7530	A4		
3333	D2	3521	B1	7533	A5		
3334	D2	3522	A1	7534	A5		
3338	E2	3524	A1	7536	C1		
3340	D3	3525	A1	7537	A3		
3341	D3	3526	B5	7538	D1		
3342	D4	3527	A5	9301	B4		
3343	E3	3528	A5	9302	B4		
3344	D5	3529	A4	9303	D4		
3345	C1	3530	A2	9304	B3		
3361	C1	3531	A4	9305	D2		
3362	C2	3532	A4	9306	E2		
3363	E1	3533	A5	9307	C2		
3364	E1	3534	A3	9308	D2		
3368	B2	3535	A5	9309	E1		
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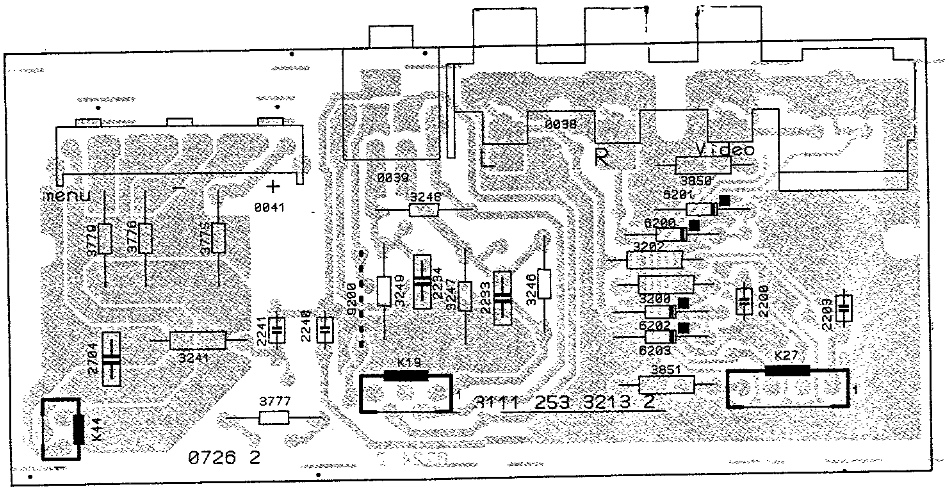
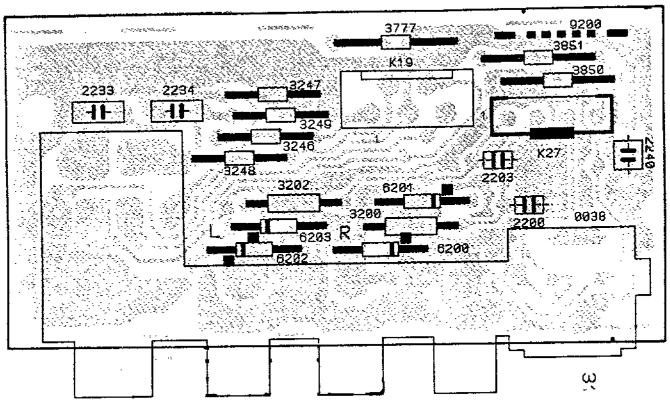
1060 SEPARATE CONTROL MODULE


menu
-
+
0041
0038
0039
L
R
Video
3850
6201
6200
3202
3200
6202
6203
3851
3248
3779
3776
3775
9200
3249
2234
3247
2233
3246
2200
2203
2241
2240
2704
3241
K19
K27
3777
K44
3111 253 3213 2
0726 2

1060 SEPARATE CONTROL MODULE 29"


3777
9200
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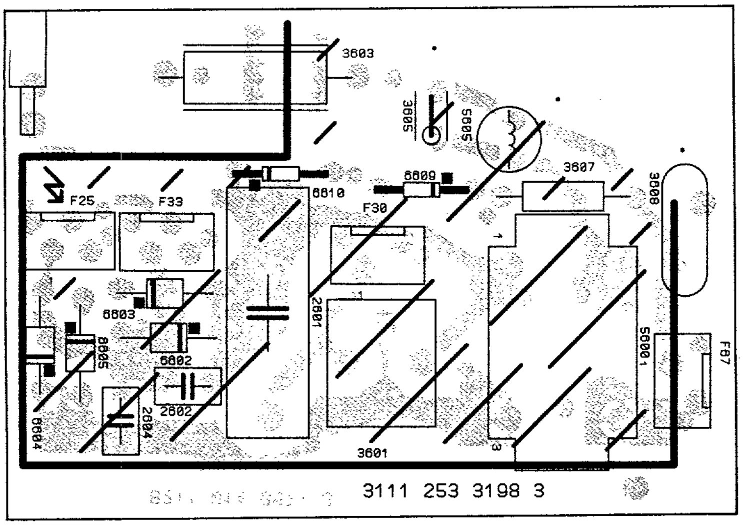
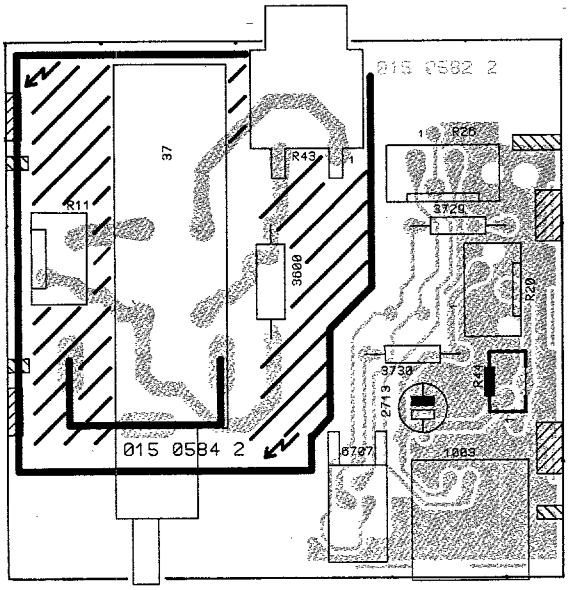
3850
K19
2233
2234
3247
3249
3246
3248
K27
2240
2203
3202
6201
3200
2200
0038
L
R
6203
6202
6200

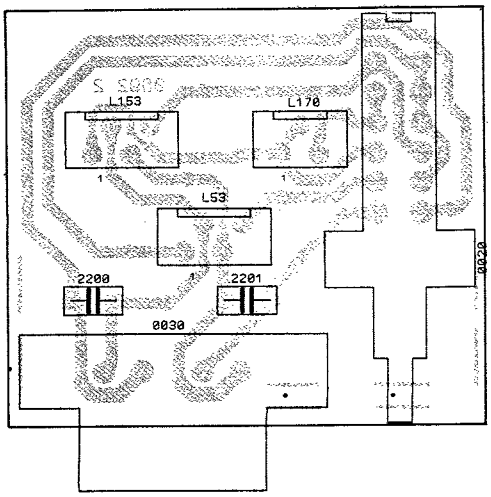
1002 MAINS FILTER MODULE


3603
3605
5605
3607
3608
6610
6609
F25
F33
F30
6603
6605
6602
2601
2602
2604
6604
3601
5001
F07
3111 253 3198 3

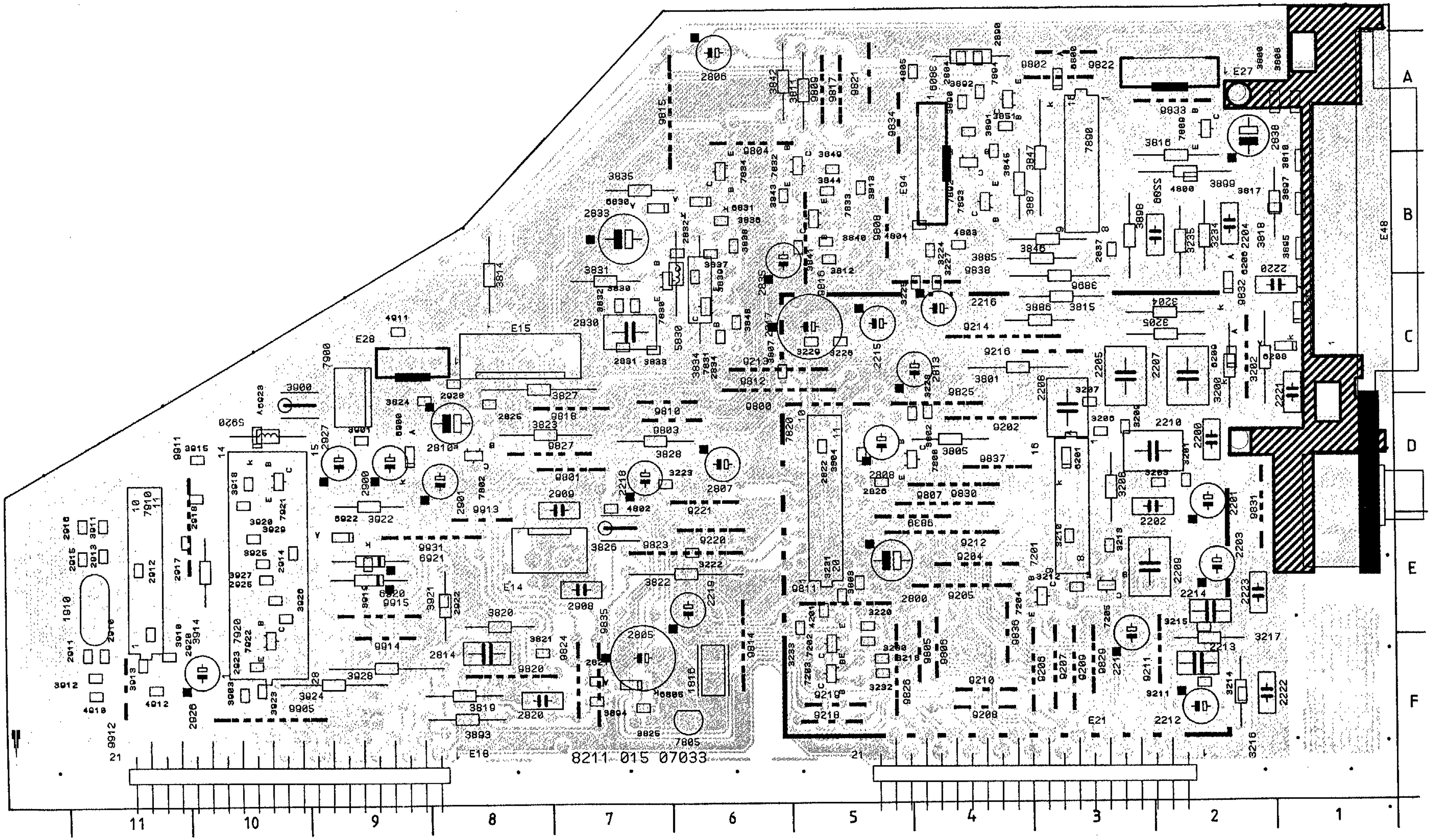
1050 SEPARATE MAINS MODULE


015 0582 2
R26
R43
37
R11
3600
3729
R20
3730
2713
R44
6707
1003
015 0584 2

1040 EXTERNAL LOUDSPEAKER MODULE


L153
L170
L53
2200
2201
0030
0020

1003 TELETEXT MODULE 4/3



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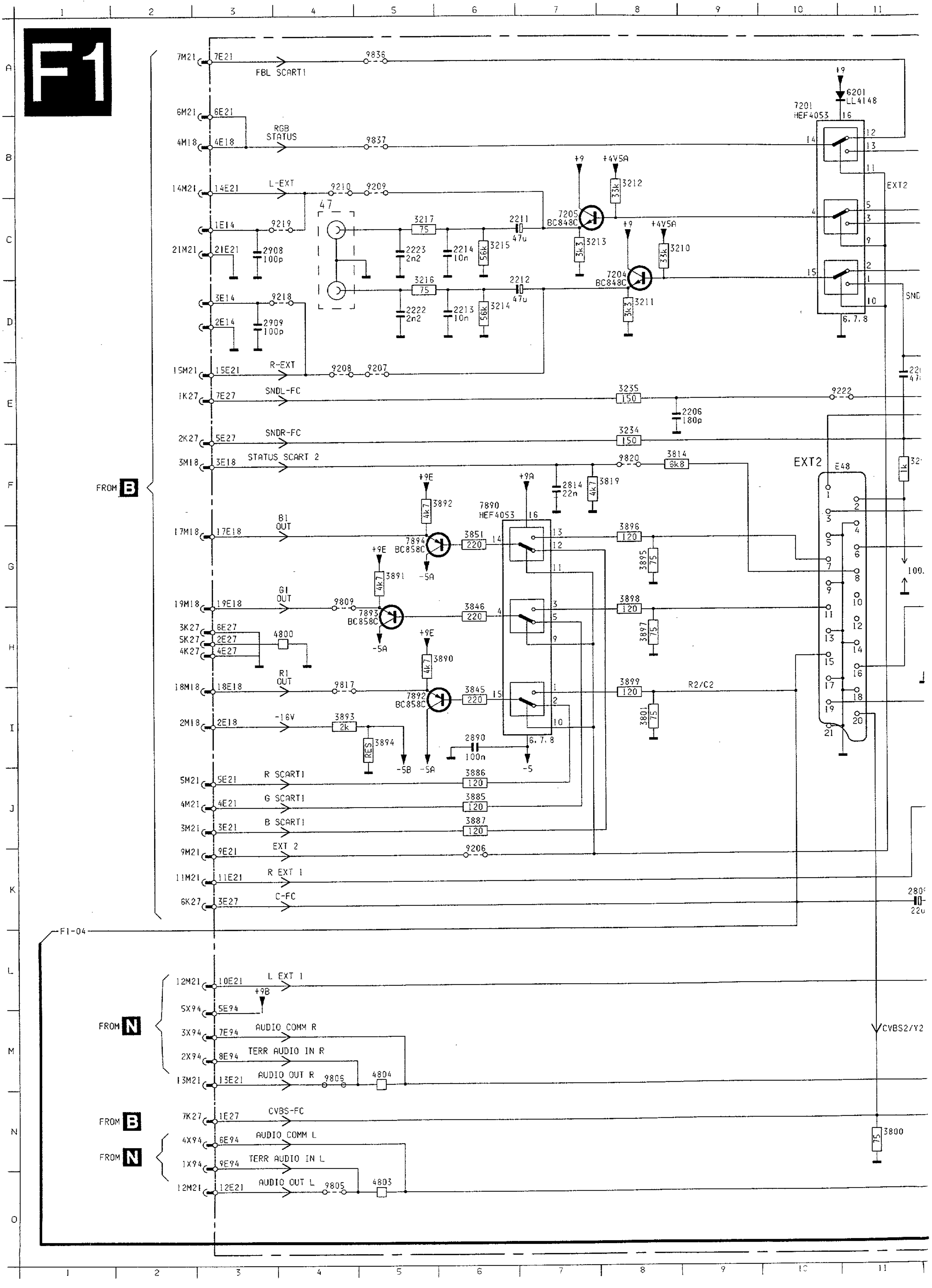
1001	C1
1002	C1
1003	C1
1816	F6
1910	E11
2200	D2
2201	E2
2202	E2
2203	E2
2204	B2
2205	D3
2206	B2
2207	D2
2208	D3
2209	E2
2210	D2
2211	F3
2212	F2
2213	F2
2214	F2
2215	C5
2216	C4
2217	C5
2218	D7
2219	F6
2220	C1
2221	D1
2222	F1
2223	E1
2800	E5
2804	A4
2805	F7
2807	D6
2808	D5
2810	D8
2813	D4
2814	F8
2820	F7
2821	F7
2822	D5
2825	D8
2826	D5
2830	C7
2831	C7
2832	C6
2833	B7
2834	C6
2835	C5
2837	C3
2838	B2
2890	A4
2900	D9
2901	D8
2908	E7
2909	E7
2910	F11
2911	F11
2912	E11
2913	E11
2914	E9
2915	E11
2916	E11
2917	E10
2918	E10
2920	F11
2922	E8
2923	F10
2925	E10
2926	F10
2927	D9
2928	D8
3200	C2
3201	D2
3202	C1
3203	D2
3204	C2
3205	C2
3206	D3
3207	D3
3208	E3
3209	D3
3210	E3
3211	F2
3212	E3
3213	E3
3214	F2
3215	F2
3216	F2
3217	F2
3218	F5
3220	F5
3222	E6
3223	D6
3224	C4
3225	C4
3226	C5
3227	C4
3228	D4
3229	C5
3230	F5
3231	E5
3232	F5
3233	F5
3234	B2
3235	B2
3800	A1
3801	C3
3802	D4
3803	E5
3804	D5
3805	D4
3807	D5
3808	A1
3809	A4
3810	B1
3811	A5
3812	C5
3813	B5
3814	C8
3815	C3
3816	B2
3817	B1
3818	B1
3819	F8
3820	F8
3821	F7
3822	E6
3823	D7
3824	D8
3825	F7
3826	E7
3827	D7
3828	D6
3830	C7
3831	C7
3832	C7
3833	C6
3834	C6
3835	B7
3836	B6
3837	C6
3838	B6
3839	C6
3840	B5
3841	C5
3842	A5
3843	B5
3844	B5
3845	B4
3846	B3
3847	B3
3848	C6
3849	B5
3851	B4
3885	C3
3886	C3
3887	B3
3890	A4
3891	B4
3892	A4
3893	F8
3894	F7
3895	C1
3896	C3
3897	B1
3898	B3
3899	B2
3900	D9
3901	D9
3903	F10
3910	F11
3911	E11
3912	F11
3913	F11
3914	E10
3915	D10
3918	D10
3919	E9
3920	E10
3921	E8
3922	E9
3923	F10
3924	F9
3925	E10
3926	F10
3927	E10
3928	F9
3929	E10
4201	F5
4800	B2
4802	E7
4803	B4
4804	B4
4805	A4
4910	F11
4911	C9
4912	F11
5830	C6
5920	D10
6201	D3
6206	C2
6207	C1
6208	C1
6209	C2
6800	A3
6805	F7
6830	B6
6831	B6
6900	D8
6920	E9
6921	E9
6922	E9
6923	D10
7201	E3
7202	F5
7203	F5
7204	E3
7205	E3
7800	D4
7802	D8
7805	F6
7809	B2
7820	E5
7830	C6
7831	C6
7832	B5
7833	B5
7834	B6
7890	B3
7892	B4
7893	B4
7894	A3
7900	D9
7910	E11
7920	E10
7921	D10
7922	F10
9202	D4
9204	E4
9205	E4
9206	F3
9207	F3
9208	F4
9209	F3
9210	F4
9211	F2
9212	E4
9213	D5
9214	C4
9216	C3
9218	F5
9219	F5
9220	E6
9221	E6
9800	D5
9801	D7
9802	A3
9803	D6
9804	B6
9805	F4
9806	F4
9807	E4
9808	B5
9809	A5
9810	D6
9811	E5
9812	D5
9814	F6
9815	A6
9816	B5
9817	A5
9818	D7
9820	F8
9821	A5
9822	A3
9823	E6
9824	F7
9825	D4
9826	F4
9827	D7
9829	F3
9830	D4
9831	E1
9832	C2
9833	A2
9834	A4
9835	F7
9836	F4
9837	D4
9838	C4
9839	E4
9905	F10
9911	E10
9912	F11
9913	E8
9914	F9
9915	F9
9931	E8
E14	E7
E15	C8
E18	G10
E21	G3
E27	A2
E28	C8
E48	C1
E94	B4

F1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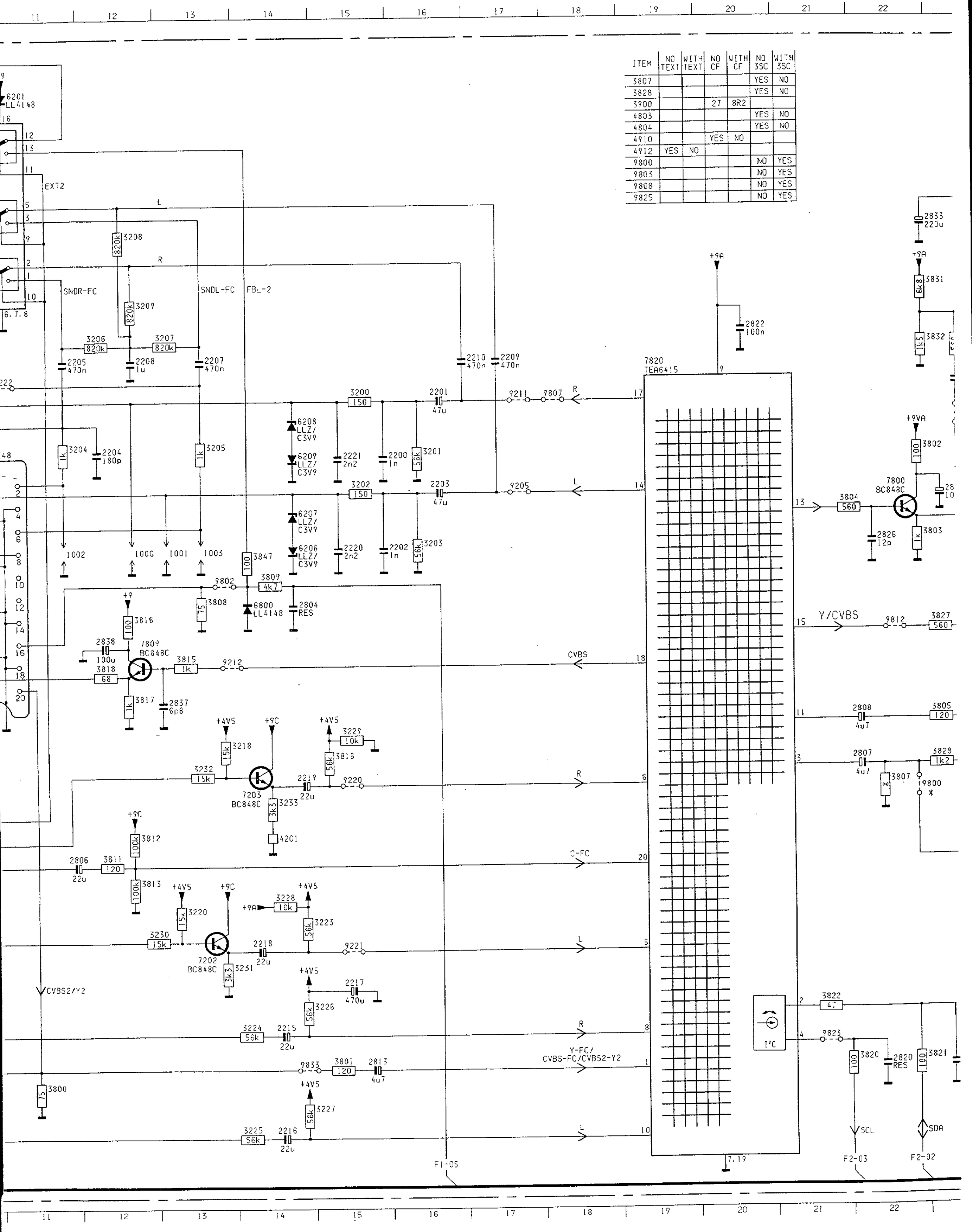
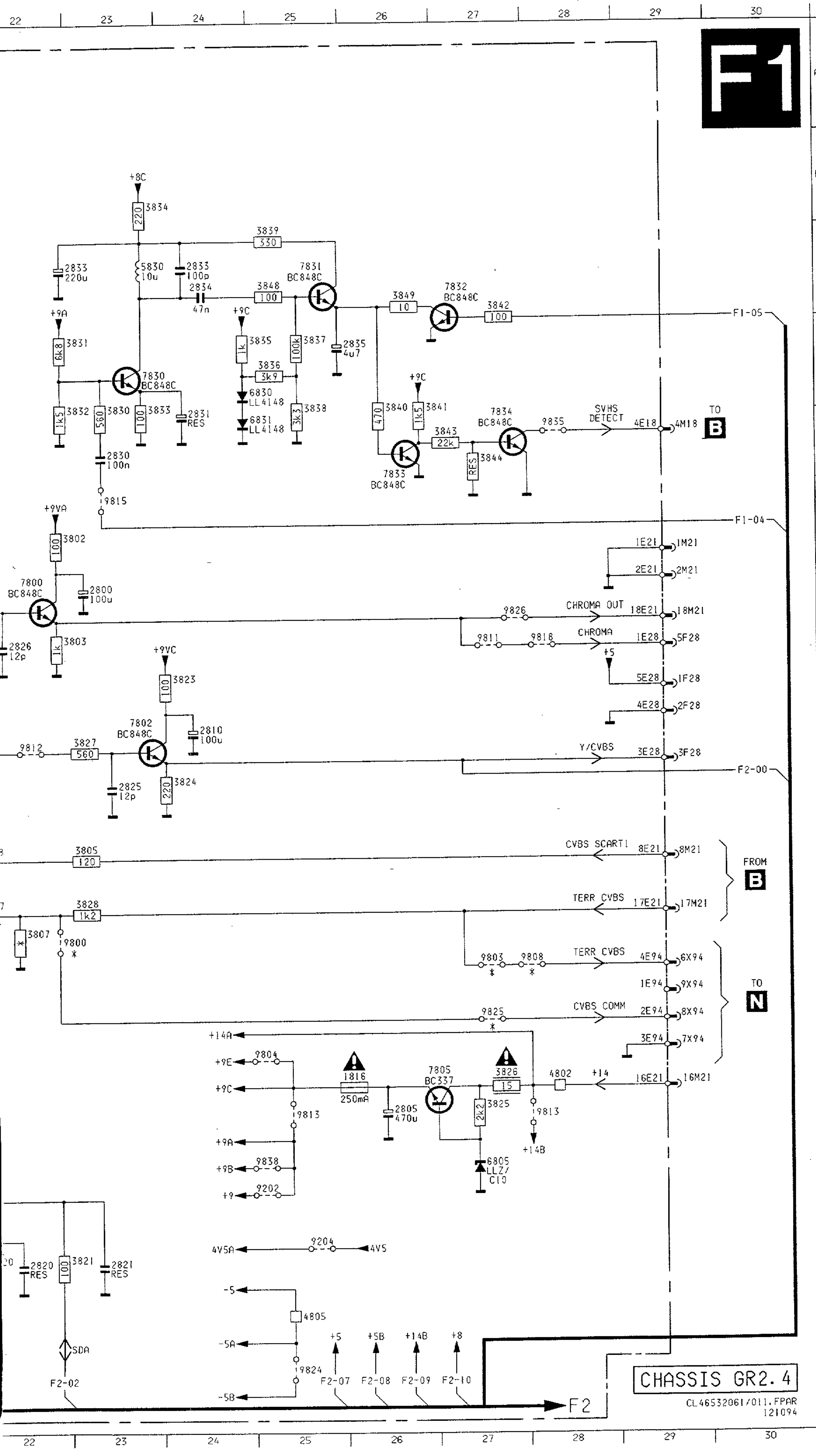
FROM N
FROM B
FROM N
7M21 7E21 FBL SCART1 9836
6M21 6E21
4M18 4E18 RGB STATUS 9837
14M21 14E21 L-EXT 9210 9209
1E14 9219
21M21 21E21 2908 100p
3E14 9218
2E14 2909 100p
15M21 15E21 R-EXT 9208 9207
47
3217 75
3216 75
2223 2n2
2222 2n2
2214 10n
2213 10n
3215 56k
3214 56k
2211 47u
2212 47u
+9
+4V5A
3212 33k
7205 BC848C
3213 3k3
7204 BC848C
3210 33k
3211 3k3
+9
6201 LL4148
7201 HEF4053
EXT2
SND
1K27 7E27 SNDL-FC 3235 150 9222
2206 180p
2K27 5E27 SNDR-FC 3234 150
3M18 3E18 STATUS SCART 2 9820 3814 6k8
2814 22n
3819 4k7
EXT2 E48
+9E
3892 4k7
+9A
7890 HEF4053
17M18 17E18 B1 OUT
7894 BC858C
3851 220
-5A
3896 120
3895 75
+9E
3891 4k7
19M18 19E18 G1 OUT 9809
7893 BC858C
3846 220
-5A
3898 120
3897 75
3K27 6E27
5K27 2E27
4K27 4E27
4800
+9E
3890 4k7
18M18 18E18 R1 OUT 9817
7892 BC858C
3845 220
3899 120
R2/C2
3801 75
2M18 2E18 -16V 3893 2k
3894 RES
-5B -5A
2890 100n
-5
6,7,8
5M21 5E21 R SCART1 3886 120
4M21 4E21 G SCART1 3885 120
3M21 3E21 B SCART1 3887 120
9M21 9E21 EXT 2 9206
11M21 11E21 R EXT 1
6K27 3E27 C-FC
2809 22u
F1-04
12M21 10E21 L EXT 1
+9B
5X94 5E94
3X94 7E94 AUDIO COMM R
2X94 8E94 TERR AUDIO IN R
13M21 13E21 AUDIO OUT R 9806 4804
CVBS2/Y2
7K27 1E27 CVBS-FC
3800 75
4X94 6E94 AUDIO COMM L
1X94 9E94 TERR AUDIO IN L
12M21 12E21 AUDIO OUT L 9805 4803
100.
A B C D E F G H I J K L M N O
1 2 3 4 5 6 7 8 9 10 11

ITEM	NO TEXT	WITH TEXT	NO CF	WITH CF	NO 3SC	WITH 3SC
3807					YES	NO
3828					YES	NO
3900			27	8R2		
4803					YES	NO
4804					YES	NO
4910			YES	NO		
4912	YES	NO				
9800					NO	YES
9803					NO	YES
9808					NO	YES
9825					NO	YES


11
12
13
14
15
16
17
18
19
20
21
22
6201
LL4148
EXT2
L
R
SNDR-FC
SNDL-FC
FBL-2
3208
820k
3209
820k
3206
820k
3207
820k
2205
470n
2208
1u
2207
470n
2210
470n
2209
470n
3200
150
2201
47u
9211
9807
3204
1k
2204
180p
3205
1k
6208
LLZ/
C3V9
6209
LLZ/
C3V9
2221
2n2
2200
1n
3201
56k
3202
150
2203
47u
9205
6207
LLZ/
C3V9
6206
LLZ/
C3V9
2220
2n2
2202
1n
3203
56k
1002
1000
1001
1003
3847
100
9802
3809
4k7
3808
75
6800
LL4148
2804
RES
+9
3816
100
2838
100u
7809
BC848C
3815
1k
9212
CVBS
3818
68
3817
1k
2837
6p8
+4V5
+9C
3218
15k
3229
10k
3816
56k
3232
15k
2219
22u
9220
7203
BC848C
3233
3k3
4201
3812
100k
2806
22u
3811
120
C-FC
3813
100k
3220
15k
3228
10k
+9A
3223
56k
3230
15k
2218
22u
9221
7202
BC848C
3231
3k3
2217
470u
3226
56k
CVBS2/Y2
3224
56k
2215
22u
Y-FC/
CVBS-FC/CVBS2-Y2
9833
3801
120
2813
4u7
3227
56k
3800
75
3225
56k
2216
22u
F1-05
+9A
2822
100n
7820
TEA6415
9
17
14
18
6
20
5
8
1
10
7,19
13
15
11
3
2
4
I²C
Y/CVBS
9812
3827
560
2808
4u7
3805
120
2807
4u7
3828
1k2
3807
9800
*
3822
47
9823
3820
100
2820
RES
3821
100
SCL
SDA
F2-03
F2-02
2833
220u
+9A
3831
6k8
3832
1k5
+9VA
3802
100
7800
BC848C
3804
560
2826
12p
3803
1k


F1
22
23
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25
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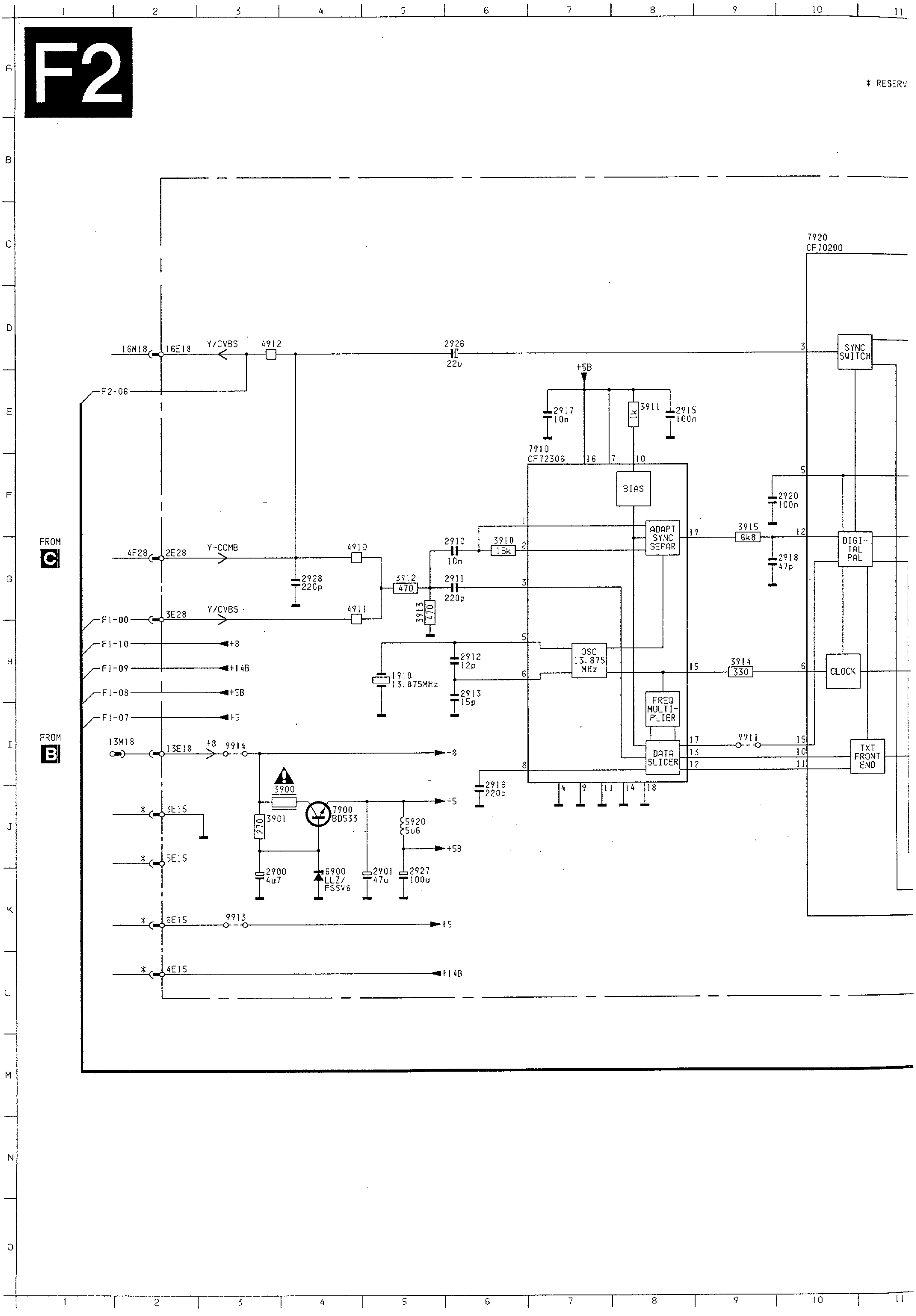
28
29
30
+8C
3834
220
3839
330
2833
220u
5830
10u
2833
100p
2834
47n
3848
100
7831
BC848C
3849
10
7832
BC848C
3842
100
F1-05
+9A
3831
6k8
+9C
3835
1k
3837
100k
2835
4u7
3836
3k9
7830
BC848C
6830
LL4148
6831
LL4148
3832
1k5
3830
560
3833
100
2831
RES
3838
3k3
3840
470
+9C
3841
1k5
7834
BC848C
9835
SVHS
DETECT
4E18
4M18
TO
B
3843
22k
7833
BC848C
RES
3844
2830
100n
9815
+9VA
F1-04
3802
100
1E21
1M21
2E21
2M21
7800
BC848C
2800
100u
9826
CHROMA OUT
18E21
18M21
2826
12p
3803
1k
9811
9818
CHROMA
1E28
5F28
+5
+9VC
5E28
1F28
3823
100
4E28
2F28
7802
BC848C
2810
100u
9812
3827
560
Y/CVBS
3E28
3F28
F2-00
2825
12p
3824
220
3805
120
CVBS SCART1
8E21
8M21
FROM
B
3828
1k2
TERR CVBS
17E21
17M21
3807
9800
9803
9808
TERR CVBS
4E94
6X94
1E94
9X94
TO
N
9825
CVBS COMM
2E94
8X94
3E94
7X94
+14A
+9E
9804
1816
250mA
7805
BC337
3826
15
4802
+14
16E21
16M21
+9C
2805
470u
3825
2k2
9813
9813
+14B
+9A
6805
LLZ/
C10
+9B
9838
+9
9202
9204
4V5A
4V5
2820
RES
3821
100
2821
RES
-5
4805
SDA
-5A
+5
+5B
+14B
+8
9824
F2-02
F2-07
F2-08
F2-09
F2-10
-5B
F2

CHASSIS GR2.4

CL46532061/011.FPAR
121094

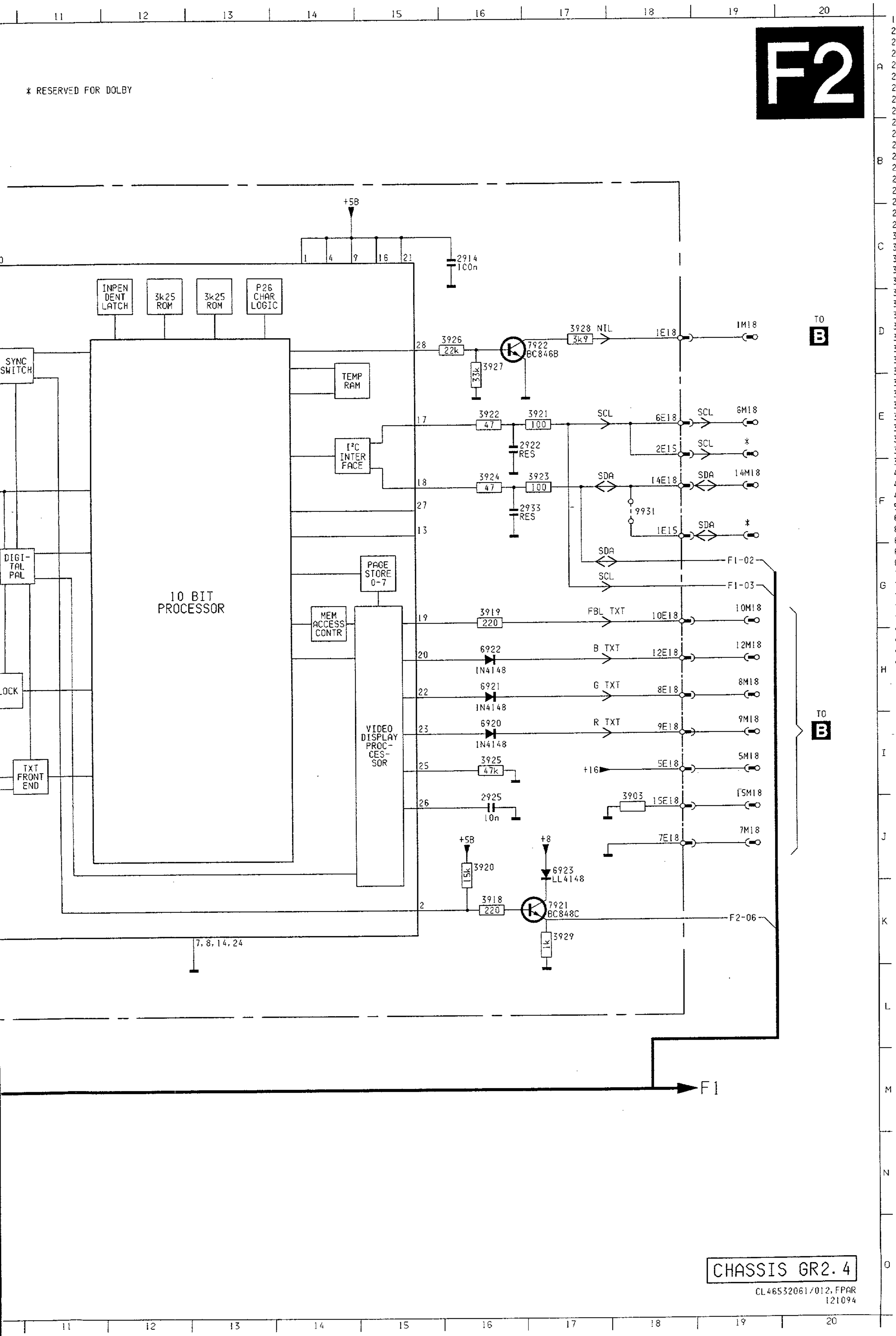
1000	G12	3828	J23
1001	G13	3830	D23
1002	G11	3831	D23
1003	G13	3832	D23
1816	L26	3833	D23
2200	F16	3834	B23
2201	E16	3835	D25
2202	G16	3836	D25
2203	F16	3837	D25
2204	F12	3838	D25
2205	E11	3839	C25
2206	E 9	3840	D26
2207	E13	3841	D26
2208	E12	3842	C27
2209	E17	3843	E27
2210	E17	3844	E27
2211	C 7	3845	I 6
2212	D 7	3846	H 6
2213	D 6	3847	G14
2214	C 6	3848	C25
2215	M14	3849	C26
2216	014	3851	G 6
2217	M15	3885	J 6
2218	L14	3886	J 6
2219	J14	3887	J 6
2220	G15	3890	H 5
2221	F15	3891	G 5
2222	D 5	3892	F 5
2223	C 5	3893	I 4
2800	F23	3894	I 5
2804	H14	3895	G 8
2805	L26	3896	G 8
2806	K11	3897	H 8
2807	J22	3898	G 8
2808	I22	3899	I 8
2810	H24	4201	K14
2813	N15	47	C 4
2814	F 7	4802	L28
2820	N22	4803	0 5
2821	N23	4804	M 5
2822	D20	4805	N25
2825	I23	5830	C23
2826	G22	6201	A11
2830	E23	6206	G14
2830	E23	6207	G14
2831	E24	6208	F14
2833	C23	6209	F14
2833	C24	6800	H14
2834	C24	6805	M27
2835	D26	6830	D25
2837	I13	6831	E25
2838	H12	7201	A10
2890	I 6	7202	L13
2908	C 3	7203	J14
2909	D 3	7204	D 8
3200	E15	7205	C 7
3201	F16	7800	F22
3202	F15	7802	H23
3203	G16	7805	L26
3204	F11	7809	H12
3205	F13	7820	E19
3206	D12	7830	D23
3207	D13	7831	C25
3208	C12	7832	C27
3209	D12	7833	E26
3210	C 8	7834	E27
3211	D 8	7890	F 6
3212	B 8	7892	I 5
3213	C 7	7893	H 5
3214	D 6	7894	G 5
3215	C 6	9202	M25
3216	D 5	9204	N25
3217	C 5	9205	F17
3218	J13	9206	K 6
3220	L13	9207	E 5
3223	L14	9208	E 4
3224	M14	9209	B 5
3225	014	9210	B 4
3226	M14	9211	E17
3227	N14	9212	I13
3228	L14	9218	D 4
3229	J15	9219	C 4
3230	L12	9220	J15
3231	L13	9221	L15
3232	J13	9222	E11
3233	J14	9800	J22
3234	E 8	9802	H13
3235	E 8	9803	K27
3800	N11	9804	L25
3801	I 8	9805	0 4
3801	N15	9806	M 4
3802	F22	9807	E18
3803	G22	9808	K28
3804	G21	9809	H 4
3805	I23	9811	G27
3807	J22	9812	H22
3808	H13	9813	L25
3809	G14	9813	L28
3811	K12	9815	E23
3812	K12	9817	I 4
3813	K12	9818	G28
3814	F 8	9820	F 8
3815	I13	9823	N21
3816	H12	9824	025
3816	J15	9825	K27
3817	I12	9826	G27
3818	I12	9833	N14
3819	F 8	9835	E28
3820	N22	9836	A 5
3821	N22	9837	B 5
3822	M21	9838	M25
3823	G24	E48	F11
3824	H24		
3825	L27		
3826	L27		
3827	H23		

Teletext


F2
* RESERV
FROM C
FROM B
16M18
16E18
Y/CVBS
4912
2926
22u
F2-06
+5B
2917
10n
3911
1k
2915
100n
7910
CF72306
BIAS
ADAPT SYNC SEPAR
OSC 13.875 MHz
FREQ MULTI-PLIER
DATA SLICER
7920
CF70200
SYNC SWITCH
DIGI-TAL PAL
CLOCK
TXT FRONT END
2920
100n
3915
6k8
2918
47p
3914
330
9911
4F28
2E28
Y-COMB
4910
2928
220p
2910
10n
3910
15k
3912
470
2911
220p
3913
470
3E28
Y/CVBS
4911
F1-00
F1-10
+8
F1-09
+14B
F1-08
+5B
F1-07
+5
1910
13.875MHz
2912
12p
2913
15p
2916
220p
13M18
13E18
+8
9914
+8
3900
3901
270
7900
BD533
+5
5920
5u6
+5B
2900
4u7
6900
LLZ/
F5V6
2901
47u
2927
100u
3E15
5E15
6E15
9913
+5
4E15
+14B

F2

* RESERVED FOR DOLBY



11 12 13 14 15 16 17 18 19 20
A B C D E F G H I J K L M N O
+5B
1 4 9 16 21
2914 100n
INPEN DENT LATCH
3k25 ROM
3k25 ROM
P26 CHAR LOGIC
SYNC SWITCH
TEMP RAM
I²C INTER FACE
DIGI-TAL PAL
10 BIT PROCESSOR
PAGE STORE 0-7
MEM ACCESS CONTR
VIDEO DISPLAY PROC-CES-SOR
LOCK
TXT FRONT END
28 3926 22k
3927 33k
7922 BC846B
3928 NIL 3k9
1E18 1M18
TO B
17 3922 47 3921 100 SCL 6E18 SCL 6M18
2922 RES
2E15 SCL *
18 3924 47 3923 100 SDA 14E18 SDA 14M18
2933 RES
9931
1E15 SDA *
27
13
SDA F1-02
SCL F1-03
19 3919 220 FBL TXT 10E18 10M18
20 6922 1N4148 B TXT 12E18 12M18
22 6921 1N4148 G TXT 8E18 8M18
23 6920 1N4148 R TXT 9E18 9M18
25 3925 47k
+16 5E18 5M18
26 2925 10n
3903 15E18 15M18
7E18 7M18
TO B
+5B 3920 15k
+8 6923 LL4148
2 3918 220
7921 BC848C
3929 1k
F2-06
7,8,14,24
F1

CHASSIS GR2.4

CL46532061/012.FPAR
121094

1910	H 5
2900	K 3
2901	K 5
2910	G 6
2911	G 6
2912	H 6
2913	H 6
2914	C16
2915	E 8
2916	J 6
2917	E 7
2918	G 9
2920	F 9
2922	E17
2925	J17
2926	D 6
2927	K 5
2928	G 3
2933	F17
3900	J 4
3901	J 3
3903	J18
3910	G 6
3911	E 8
3912	G 5
3913	G 5
3914	H 9
3915	F 9
3918	K17
3919	G17
3920	J16
3921	E17
3922	E17
3923	F17
3924	F17
3925	I17
3926	D16
3927	D16
3928	D18
3929	K17
4910	G 4
4911	G 4
4912	D 3
5920	J 5
6900	K 4
6920	I17
6921	H17
6922	H17
6923	J17
7900	J 4
7910	F 6
7920	C10
7921	K17
7922	D17
9911	I 9
9913	K 3
9914	I 3
9931	F18

Teletext

The TXT-decoder is integrated in the Euro-module.

The TXT-decoder can process the following systems:

- World Teletext System (WST)
- BBC system: FLOF (full level one feature)
- German system: TOP (table of Pages).

The TXT-decoder has a memory of 8 pages with the objective to decrease the waiting time.
The content of the memory depends on the system.

- WST with pages without sub-codes: page -1, +1, +2, +3, +4, page last received, table of contents + page displayed.
- WST with pages with sub-codes: page -1, +1, +2, next sub-page, next +1 sub-page, page last received + table of contents.
- FLOF: 4 pages linked to the coloured buttons (red, green, yellow, blue) page -1, page last displayed and table of contents.
- TOP: basic Top table, page +1, 1 or 2 subsequent group, 2 or 3 subsequent blocks, or page +1, +2.

The 'Page Look Up Table' (PLUT) is built up immediately in the 3 systems after switch-on.
The Plut ensures that only the transmitted pages are stored in the memory.

The TXT circuit consists of 2 ICs:

- IC 7910: Teletext Data Slicer: CF 72306.
- IC 7920: Universal Teletext Decoder: 'Eurotext': CF 70200.

The Teletext Data Slicer: CF 72306

The CF 72306 IC sees to:
- Sync. separation
- Teletext data processing
- Data clock regeneration
- Transfer of clock, data and composite sync. signals to the digital IC teletext decoder.

The sync. separator slicing level is adjustable, so that it can process a whole series of video amplitudes and disturbed signals.

The data slicer uses an adjustable signal recognition and clock phase algorithm, so that it can work in a broad area of clock run-in amplitudes.

- The IC has 3 video inputs (pins 1, 2, 3). Pins 1, 2 are used for sync. processing and pin 3 is used for taking TXT information from the video.
  Resistor 3910 forms LPF (Low Pass Filter) with capacity in the IC for the removal of the high frequencies at the sync. level.
  Resistors R 3912, R 3913 are adaptations of the level from 2V to 1V pp.

The TXT clock of 6.937MHz is conducted from the 13.875MHz oscillator frequency. The black level is stocked on pin 8 (C REF) via C 2916.
The frequency is raised to 69MHz via a 'Frequency multiplier', to enable the processing of all signals in the IC.

The 'OSCOUT' (pin 15) transfers the 13.876 MHz to the TXT-decoder.
R 3914 is present in order to avoid irradiation in the MF part.
During the VBi the data slicer is activated via 'WIND', so that the TXT data can come out on pin 13.
The sync. signal (pin 19) is sent to pin 12 TXT decoder via LDF filter (R 3915, C 2918).

Universal Teletext decoder 'Eurotext': CF 70200

Digital IC for the benefit of decoding the world standard systems:
- 8 pages of memory
- automatic detection of WST, FLOF, or TOP
- Packet 26 flicker-free character processing.

The TDATA, T.CIK and composite sync. of the data slicer are offered to inputs 10, 11 and 12.
The IC is connected to the I^{2}C line via 16 (data) and 17 (clock).

Via Flag 2 (28) the NIL signal is offered to prevent the text from flickering on the screen.

The Reset is effected via C 2920 on pin 5.

Via diodes 6920, 6921, 6922 the RGB outputs are transmitted to the TDA 4780 together with the blanking signal (pin 19).

The diodes prevent 'blooming' of the text, as well as the level of the OSD being pulled down.

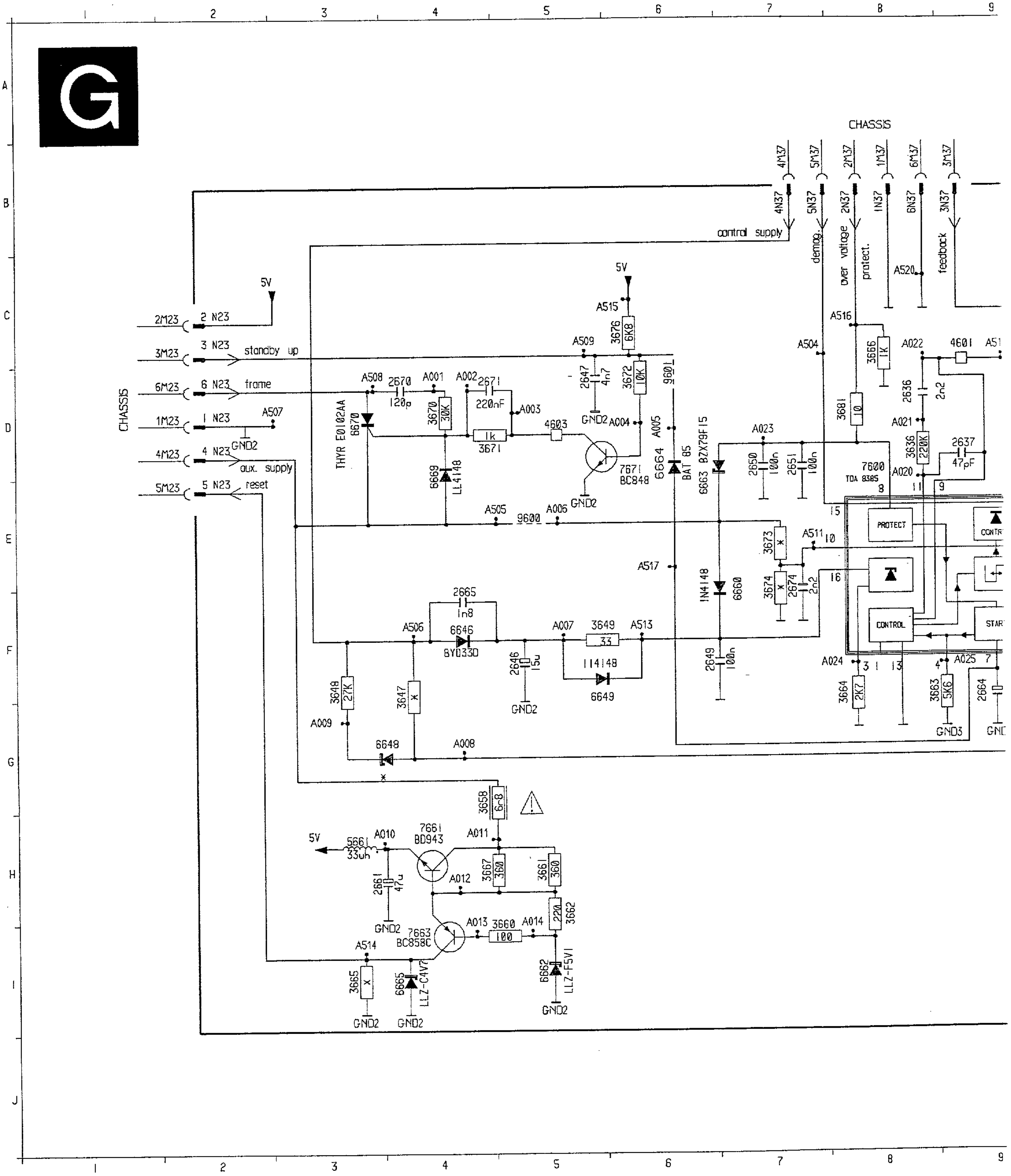
The amplitude of the output signals is determined by C 2925 (REF) and R 3925 (RGB set).

Pin 2 (sync. out of CSB) is the output of the internal switch, which transmits either the composite sync. signal of the internal sync. generator or the video input inlet when picture information is shown (mixed mode - subtitling).

Via the clock in (pin 6) 13.876 MHz is received from the data slicer.
Via PLL the pulses in the TXT-decoder are synchronized to the sync. of the video signal.
Character generator is available in the IC.
The internal ROM controls the decoding and the choice of the display.
In the internal RAM 8 pages can be stored.

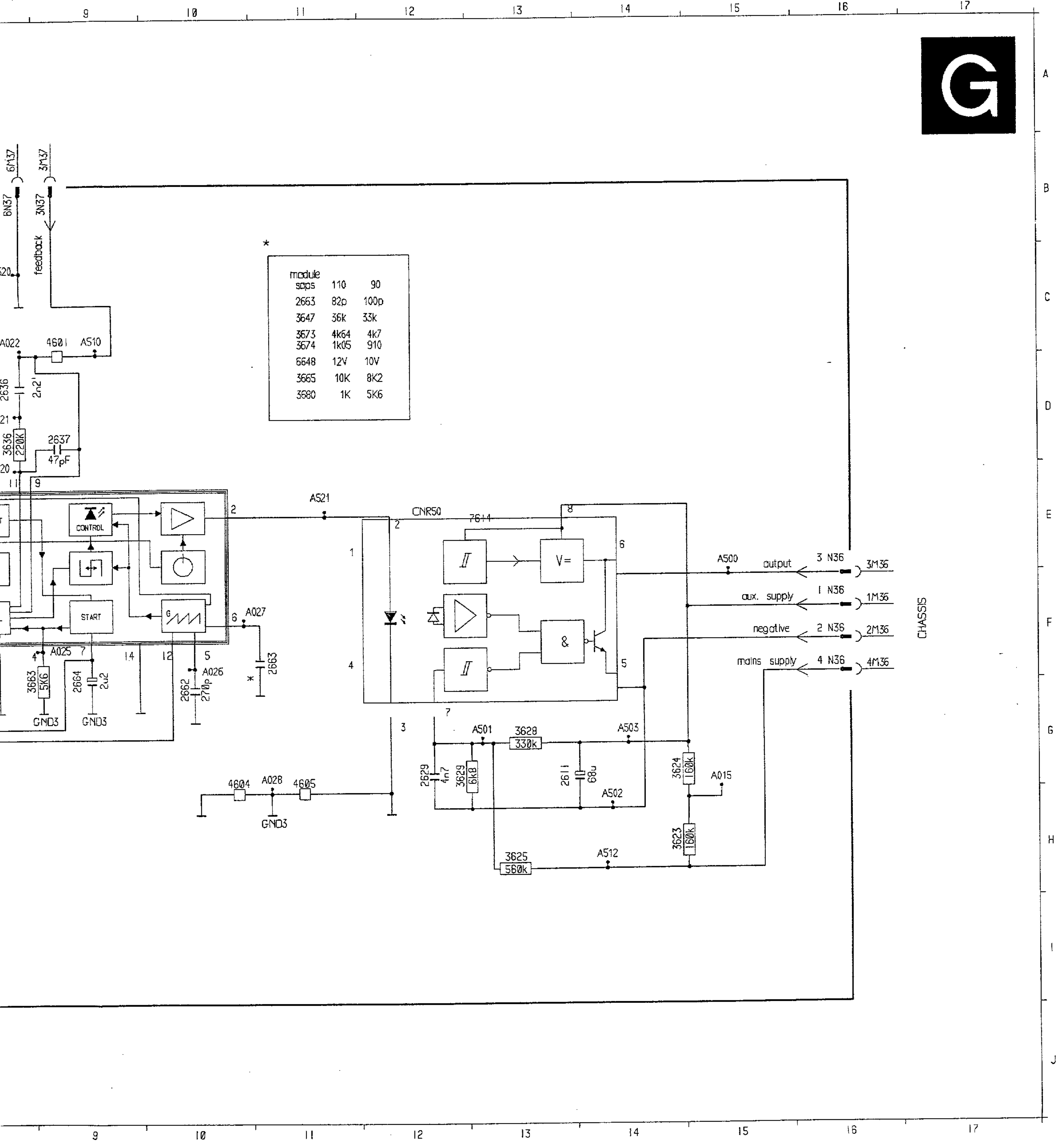
Sops controle module

2611	G13	2647	D 5	2662	G10	2671	D 4	3628	G13	3649	F 5	3663	F 8	3670	D 4	3676	C 6	4604	G10	6649	G 5	6665	I 4	7661	H 4
2629	G12	2649	F 6	2663	F11	2674	F 7	3629	G12	3658	G 4	3664	F 8	3671	D 4	3680	I10	4605	G11	6660	F 7	6669	D 4	7663	I 4
2636	D 8	2650	D 7	2664	F 9	3623	H14	3636	D 8	3660	I 5	3665	I 3	3672	D 6	3681	D 8	5661	H 3	6662	I 5	6670	D 3	7671	D 6
2637	D 9	2651	D 7	2665	F 4	3624	G14	3647	F 4	3661	H 5	3666	C 8	3673	E 7	4601	C 9	6646	F 4	6663	E 6	7600	D 8	9600	E 5
2646	F 5	2661	H 3	2670	D 4	3625	H13	3648	F 3	3662	H 5	3667	H 4	3674	F 7	4603	D 5	6648	G 4	6664	D 6	7614	E14	9601	D 6



1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
G
CHASSIS
4M37
5M37
2M37
1M37
6M37
3M37
4N37
5N37
2N37
1N37
6N37
3N37
control supply
demag.
over voltage
protect.
feedback
A520
5V
2M23
2 N23
3M23
3 N23
standby up
6M23
6 N23
frame
1M23
1 N23
A507
GND2
4M23
4 N23
aux. supply
5M23
5 N23
reset
CHASSIS
A508
2670
120p
A001
A002
2671
220nF
A003
THYR E0102AA
6670
3670
30K
1k
3671
4603
6669
LL4148
A515
5V
A509
3676
6K8
2647
4n7
3672
10K
GND2
A004
7671
BC848
GND2
A005
9601
6664
BAT 85
6663 BZX79F15
A023
2650
100n
2651
100n
A516
A504
3666
1K
3681
10
7600
TDA 8385
8
15
A022
4601
A51
2636
2n2
A021
3636
220K
2637
47pF
A020
11
9
A505
9600
A006
3673
A511
10
A517
1N4148
6660
3674
2674
2n2
16
PROTECT
CONTROL
CONTR
STAR
2665
1n8
A506
6646
BYD33D
2646
15u
GND2
A007
3649
33
A513
1l4148
6649
2649
100n
A024
3
1
13
4
A025
7
3664
2K7
3663
5K6
2664
GND3
GNE
3648
27K
3647
A009
6648
A008
3658
6r8
5V
5661
33uh
A010
7661
BD943
A011
2661
47u
A012
3667
360
3661
360
GND2
7663
BC858C
A013
3660
100
A014
220
3662
A514
3665
6665
LLZ-C4V7
6662
LLZ-F5V1
GND2
GND2
GND2

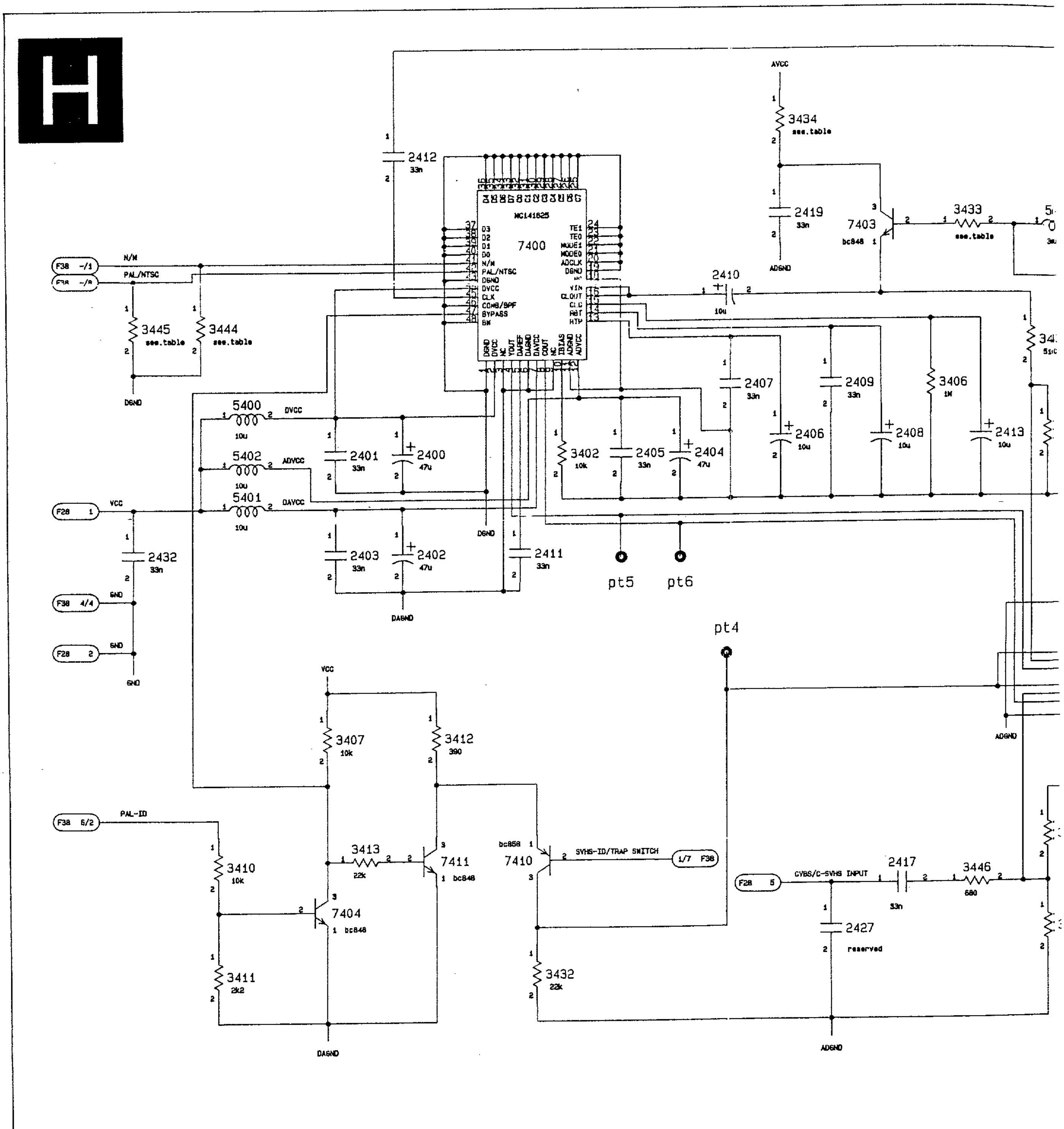
7661	H 4	A001	D 4	A006	E 5	A011	H 4	A020	E 8	A025	F 9	A501	G13	A506	F 4	A511	E 7	A516	C 8	A521	E11	N23	E 2	N36	F16	N37	B 7
7663	I 4	A002	D 4	A007	F 5	A012	H 4	A021	D 8	A026	F10	A502	H14	A507	D 3	A512	H14	A517	E 6	N23	D 2	N23	D 2	N37	B 8	N37	B 8
7671	D 6	A003	D 5	A008	G 4	A013	I 4	A022	C 8	A027	F11	A503	G14	A508	D 3	A513	F 6	A518	I10	N23	C 2	N36	F16	N37	B 8		
9600	E 5	A004	D 6	A009	G 3	A014	I 5	A023	D 7	A028	G11	A504	C 7	A509	C 5	A514	I 3	A519	I10	N23	C 2	N36	F16	N37	B 9		
9601	D 6	A005	D 6	A010	H 3	A015	G15	A024	F 8	A500	E15	A505	E 5	A510	C 9	A515	C 6	A520	C 8	N23	D 2	N36	E16	N37	B 7		


9
10
11
12
13
14
15
16
17
G
A
B
C
D
E
F
G
H
I
J
6M37
3M37
6N37
3N37
feedback
520
A022
4601
A510
2636
2n2
21
3636
220K
2637
47pF
20
11
9
CONTROL
START
G
2
6
A027
A025
4
7
14
12
5
3663
5K6
2664
2u2
GND3
GND3
2662
270p
A026
2663
*
A521
CNR50
7614
2
1
4
3
8
6
5
V=
&
A500
output
3 N36
3M36
aux. supply
1 N36
1M36
negative
2 N36
2M36
mains supply
4 N36
4M36
CHASSIS
7
A501
3628
330k
A503
2629
4n7
3629
6k8
2611
68u
A502
3624
160k
A015
3623
160k
3625
560k
A512
4604
A028
4605
GND3

*

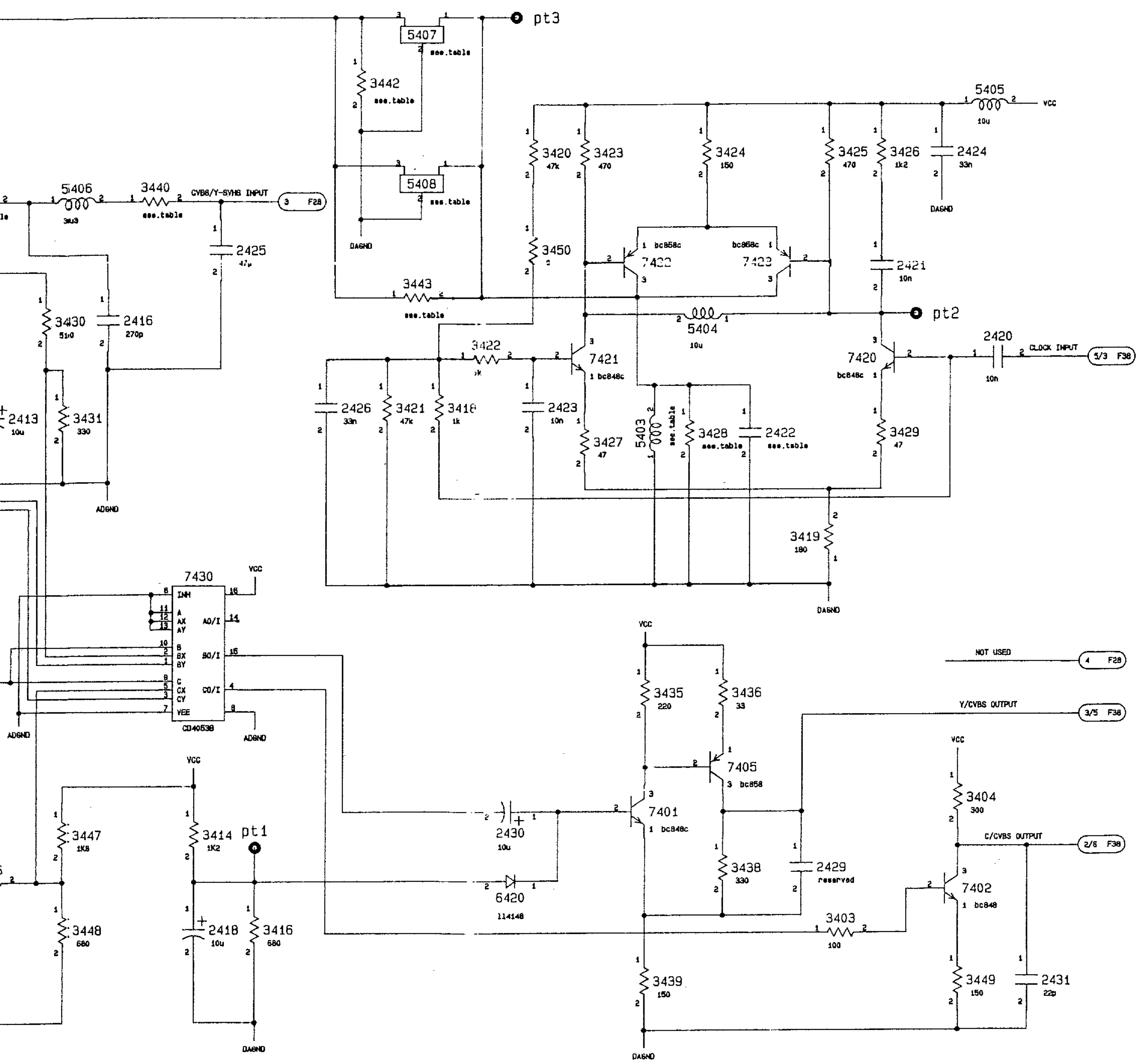
module saps	110	90
2663	82p	100p
3647	36k	33k
3673	4k64	4k7
3674	1k05	910
6648	12V	10V
3665	10K	8K2
3680	1K	5K6

Comb filter module


H
AVCC
3434
see.table
2419
33n
7403
bc848
3433
see.table
ADGND
2412
33n
MC141625
7400
D3
D2
D1
D0
N/M
PAL/NTSC
DGND
DVCC
CLK
COMB/BPF
BYPASS
BW
TE1
TE0
MODE1
MODE0
ADCLK
DGND
VIN
CLOUT
CLC
RBT
RTP
2410
10u
F38 -/1
N/M
PAL/NTSC
3445
see.table
3444
see.table
DGND
5400
10u
DVCC
5402
10u
ADVCC
5401
10u
DAVCC
F28 1
VCC
2401
33n
2400
47u
2403
33n
2402
47u
DAGND
2411
33n
2407
33n
2409
33n
3406
1M
2406
10u
2408
10u
2413
10u
3402
10k
2405
33n
2404
47u
pt5
pt6
pt4
2432
33n
GND
F38 4/4
F28 2
GND
ADGND
VCC
3407
10k
3412
390
F38 5/2
PAL-ID
3410
10k
3411
2k2
3413
22k
7411
bc848
7404
bc848
DAGND
bc858
7410
SVHS-ID/TRAP SWITCH
1/7 F38
3432
22k
F28 5
CVBS/C-SVHS INPUT
2417
33n
3446
680
2427
reserved
ADGND

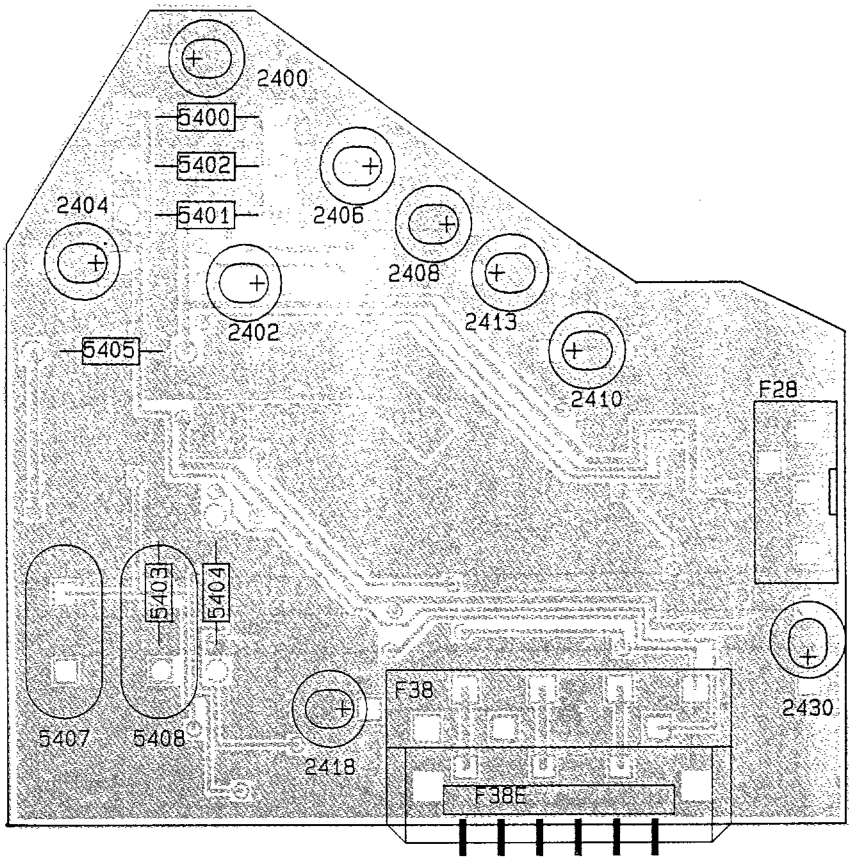
COMPONENTS

	2422	3428	5403	3443	3442	5407	5408	3444	3445	3440	3433	3434		sta
STANDARD VERSION :	100p	820	0.68u	0	-	-	-	0	0	100	220	220		
OVERSEAS VERSION :	-	240	-	-	-	SFE14-3	SFE17-7	-	-	120	47	0		


pt3
5407
see.table
3442
see.table
5408
see.table
DAGND
5405
10u
VCC
3420
47k
3423
470
3424
150
3425
470
3426
1k2
2424
33n
DAGND
5406
3u3
3440
see.table
CVBS/Y-SVHS INPUT
3 F28
2425
47µ
3450
bc858c
7422
bc858c
7423
2421
10n
3443
see.table
pt2
5404
10u
3430
510
2416
270p
3422
1k
7421
bc848c
7420
bc848c
2420
10n
CLOCK INPUT
5/3 F38
2413
10u
3431
330
2426
33n
3421
47k
3418
1k
2423
10n
3427
47
5403
see.table
3428
see.table
2422
see.table
3429
47
ADGND
3419
180
DAGND
7430
VCC
INH
A
AX
AY
B
BX
BY
C
CX
CY
VEE
AO/I
BO/I
CO/I
CD4053B
ADGND
ADGND
VCC
3435
220
3436
33
NOT USED
4 F28
Y/CVBS OUTPUT
3/5 F38
7405
bc858
VCC
3404
300
VCC
7401
bc848c
C/CVBS OUTPUT
2/6 F38
3447
1K8
3414
1K2
pt1
2430
10u
3438
330
2429
reserved
6420
1N4148
7402
bc848
3403
100
3448
680
2418
10u
3416
680
3439
150
3449
150
2431
22p
DAGND
DAGND

CONNECTOR F38	12 NC NUMBER
standar ver / overseas ver	
- 6 5 4 3 2 1 -	3111 258 02050
1 2 3 4 5 6 7 8	3111 258 00250

Comb filter module


2400
5400
5402
2404
5401
2406
2408
2402
2413
5405
2410
F28
5403
5404
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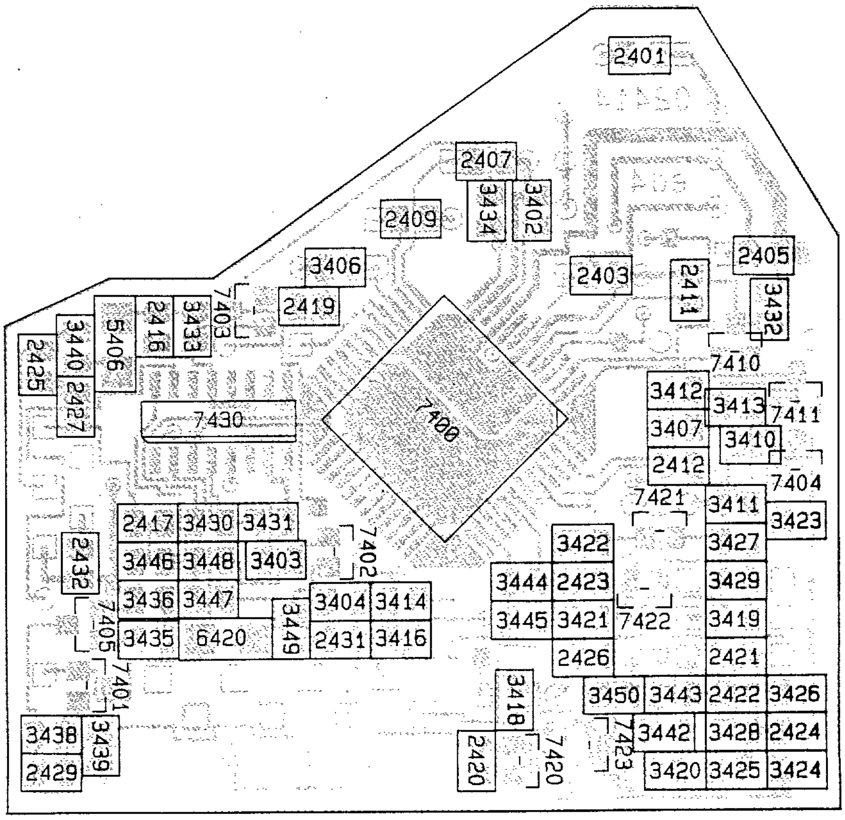
F38
5407
5408
2418
F38E


2401
2407
3434
3402
2409
3406
2403
2411
2405
3432
7403
2419
2416
3433
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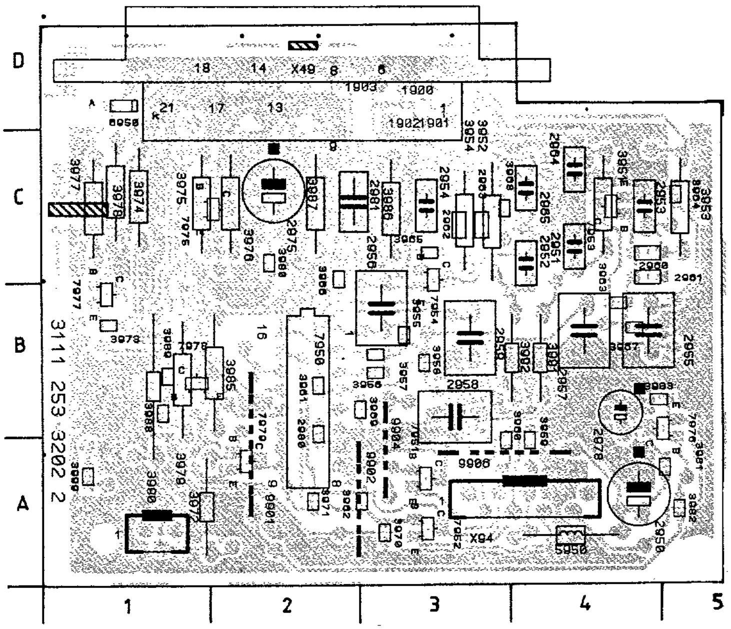
3440
2425
2427
7410
3412
3413
7411
7430
7400
3407
3410
2412
7404
7421
3411
3423
2417
3430
3431
7402
3422
3427
3446
3448
3403
2432
3444
2423
3429
3436
3447
3404
3414
3445
3421
7422
3419
7405
3435
6420
3449
2431
3416
2426
2421
7401
3418
3450
3443
2422
3426
3438
3439
7423
3442
3428
2424
2429
2420
7420
3420
3425
3424

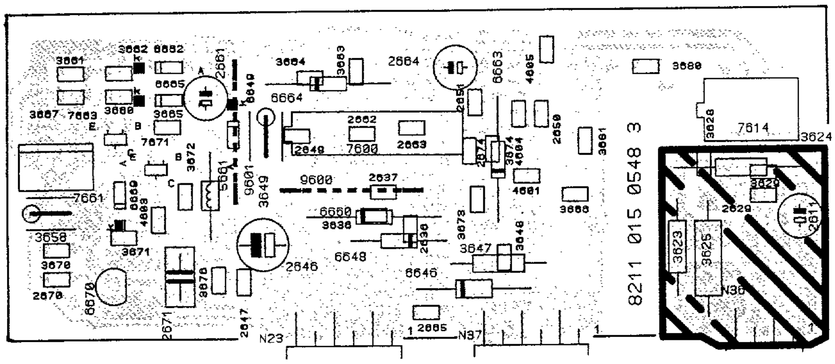
Third scart module 1006


D
C
B
A
1
2
3
4
5
3111 253 3202 2
X49
X94
1900
1901
1902
1903
7950
2958
9906
5950
6950

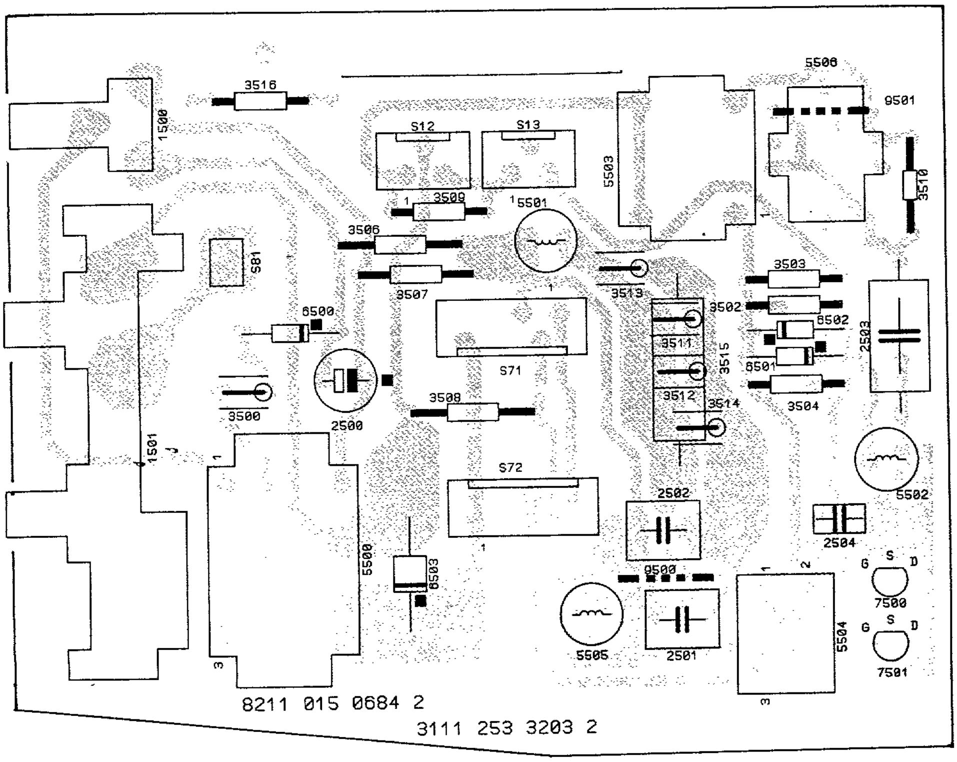
1900	D3	3962	A3	7953	C4
1901	D3	3963	B4	7954	C3
1902	D3	3964	C5	7975	C2
1903	D3	3965	C3	7976	B5
2950	A4	3966	C2	7977	B1
2951	C4	3967	B4	7978	B2
2952	C4	3968	C4	7979	A2
2953	C5	3969	B3	9901	B2
2954	C3	3970	A3	9902	A3
2955	B5	3971	A2	9904	A3
2956	B3	3972	A2	9906	A4
2957	B4	3973	B1	X31	A1
2958	B3	3974	C1	X49	D3
2959	B3	3975	C2	X94	A4
2960	C5	3976	C2		
2961	C5	3977	C1		
2962	C3	3978	C1		
2963	C3	3979	B1		
2964	C4	3980	C2		
2965	C4	3981	A5		
2975	C2	3982	A5		
2978	B4	3983	B5		
2980	B2	3985	B2		
2981	C3	3986	C3		
3951	C4	3987	C2		
3952	C3	3988	B1		
3953	C5	3989	B1		
3954	C3	3990	B1		
3955	B3	3991	B4		
3956	B3	3992	B4		
3957	B3	5950	A4		
3958	B3	6950	D1		
3959	B4	7950	B2		
3960	B4	7951	A3		
3961	B2	7952	A3		

Sops controle module/Scanning module

SOPS CONTROLE MODULE 1007

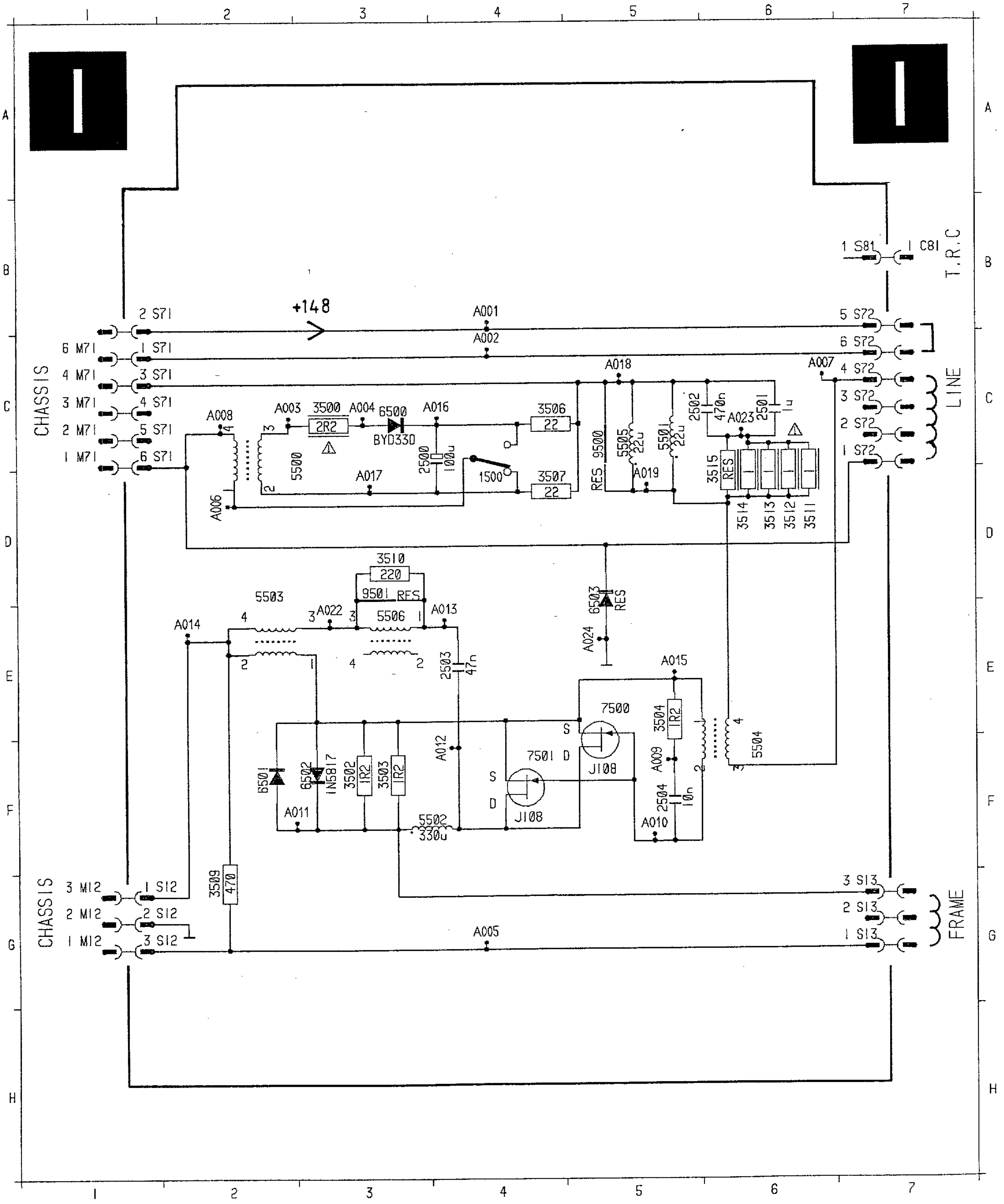

3661
3662 6662
6665
3667 7663 3660
3665
E
B
7671
A
B
C
3672
5661
9601
3649
6649
2661
A
K
7661
3658
3670
2670
6670
3671
6669
4663
2671
3676
2647
N23
3664
3663
6664
2664
2662
2649
7600
2663
9600
2637
6660
3636
2636
6648
2646
6663
4665
2651
2674
3674
4664
2650
4661
3661
3673
3648
3647
6646
2665
N37
1
3680
3666
8211 015 0548 3
3628
7614
3624
3629
2629
2611
3623
3625
N36
1

SCANNING MODULE 1009

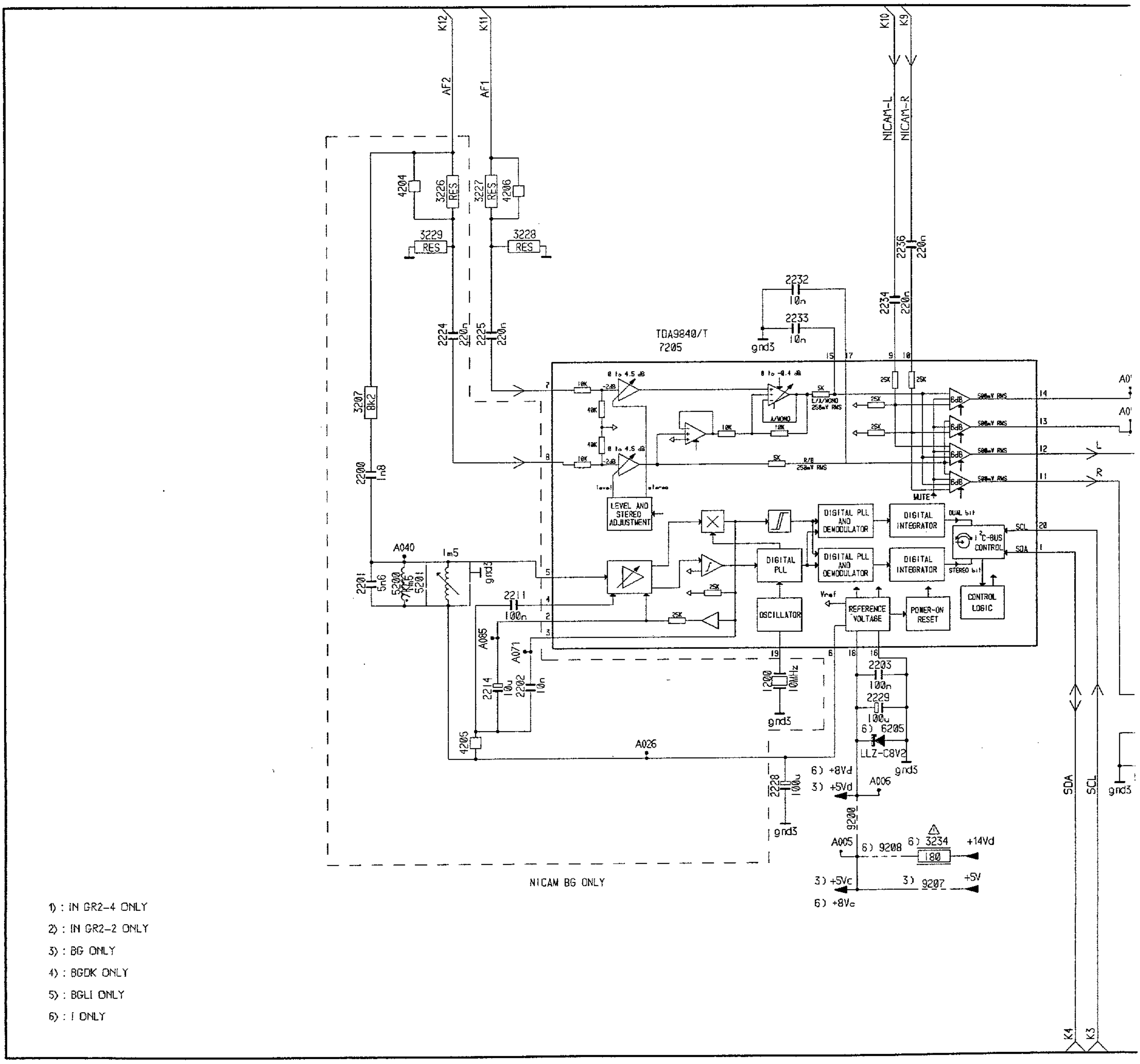

3516
1500
S12
S13
5503
5506
9501
3510
3509
1
1
5501
3506
S81
3507
3513
3503
3502
6502
2503
3511
3515
6501
6500
3500
2500
3508
S71
3512
3514
3504
1501
1
S72
5502
2502
2504
5500
6503
9500
1
2
5504
G S D
7500
G S D
7501
5505
2501
3
3
1
8211 015 0684 2
3111 253 3203 2

Scanning module

1500	D 4
1501	A 4
2500	C 3
2501	C 6
2502	C 5
2503	E 4
2504	F 5
3500	C 3
3502	F 3
3503	F 3
3504	E 5
3506	C 4
3507	D 4
3508	B 3
3509	G 2
3510	D 3
3511	D 6
3512	D 6
3513	D 6
3514	D 6
3515	D 6
3516	G 4
5500	C 3
5501	C 5
5502	F 4
5503	D 2
5504	F 6
5505	C 5
5506	E 3
6500	C 3
6501	F 2
6502	F 3
6503	D 5
7500	E 5
7501	F 4
9500	C 5
9501	D 3
A001	B 4
A002	C 4
A003	C 2
A004	C 3
A005	G 4
A006	D 2
A007	C 6
A008	C 2
A009	F 5
A010	F 5
A011	F 2
A012	F 4
A013	E 4
A014	E 2
A015	E 5
A016	C 4
A017	D 3
A018	C 5
A019	D 5
A020	B 3
A021	B 5
A022	E 3
A023	C 6
A024	E 5
A025	G 4
A026	G 3
S12	G 2
S12	G 2
S12	G 2
S13	G 7
S13	G 7
S13	G 7
S71	C 2
S71	B 2
S71	C 2
S71	C 2
S71	C 2
S71	C 2
S72	C 7
S72	C 7
S72	C 7
S72	C 7
S72	B 7
S72	C 7
S81	B 7

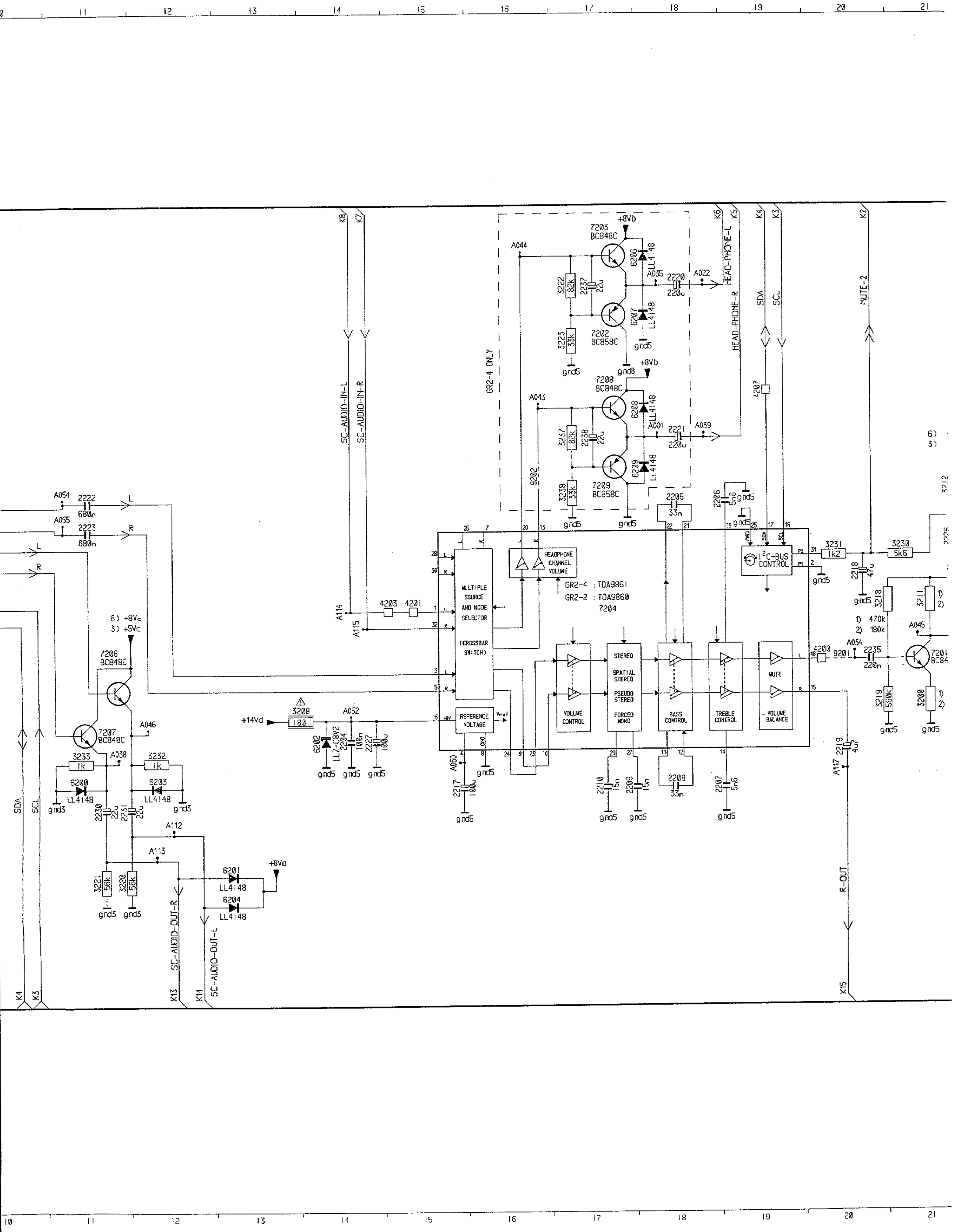

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
I
+148
A001
A002
2 S71
6 M71
1 S71
4 M71
3 S71
3 M71
4 S71
2 M71
5 S71
1 M71
6 S71
CHASSIS
A008
A003
3500
2R2
A004
6500
BYD33D
A016
3506
22
3507
22
1500
2500
100u
A017
5500
A006
A018
RES
9500
5505
22u
5501
22u
A019
2502
470n
2501
1u
A023
3515
RES
3514
3513
3512
3511
A007
1 S81
1 C81
T.R.C
5 S72
6 S72
4 S72
3 S72
2 S72
1 S72
LINE
3510
220
9501
RES
5503
A022
5506
A013
A014
2503
47n
6503
RES
A024
A015
7500
J108
S
3504
1R2
5504
A009
2504
10n
A010
7501
D
S
D
J108
A012
6501
6502
1N5817
3502
1R2
3503
1R2
A011
5502
330u
3509
470
CHASSIS
3 M12
1 S12
2 M12
2 S12
1 M12
3 S12
A005
3 S13
2 S13
1 S13
FRAME

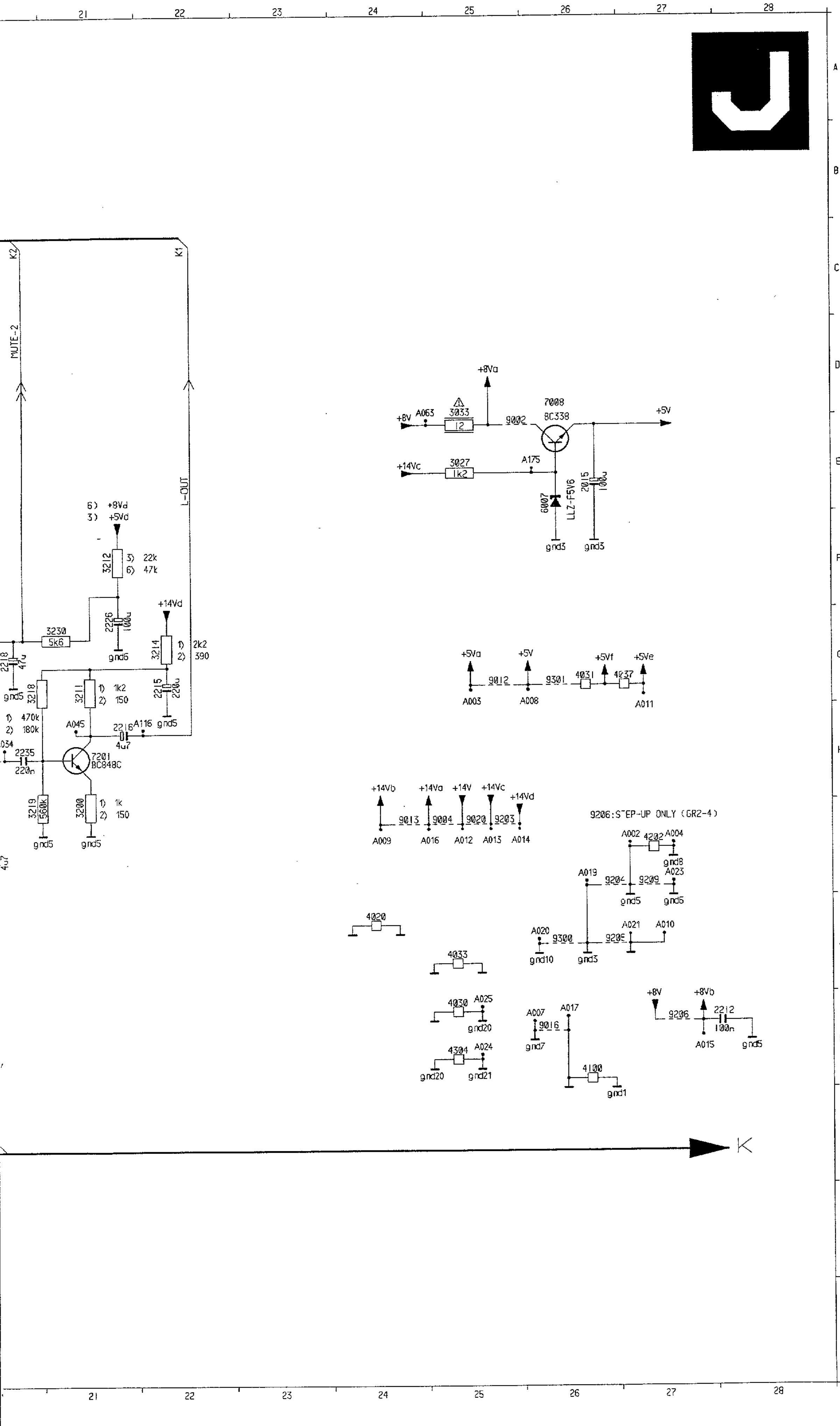
J


K12
K11
AF2
AF1
K10
K9
NICAM-L
NICAM-R
4204
3226 RES
3227 RES
4206
3229 RES
3228 RES
2224 220n
2225 220n
2236 220n
2234 220n
2232 10n
2233 10n
gnd3
TDA9840/T
7205
3207 8k2
2200 1n8
A040
1m5
2201 5n6
5200 1m5
5201
gnd3
2211 100n
A085
A071
2214 10u
2202 10n
4205
A026
LEVEL AND STEREO ADJUSTMENT
DIGITAL PLL AND DEMODULATOR
DIGITAL INTEGRATOR
DIGITAL PLL
OSCILLATOR
REFERENCE VOLTAGE
POWER-ON RESET
CONTROL LOGIC
I²C-BUS CONTROL
MUTE
Vref
SCL
SDA
A0'
L
R
1200 10MHz
2203 100n
2229 100u
6) 6205
LLZ-C8V2
gnd3
2228 100u
6) +8Vd
3) +5Vd
A006
9200
A005
6) 9208
6) 3234
180
+14Vd
3) +5Vc
3) 9207
+5V
6) +8Vc
NICAM BG ONLY
SDA
SCL
gnd3
K4
K3

1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
6) : I ONLY

Module FI-Son Nicam

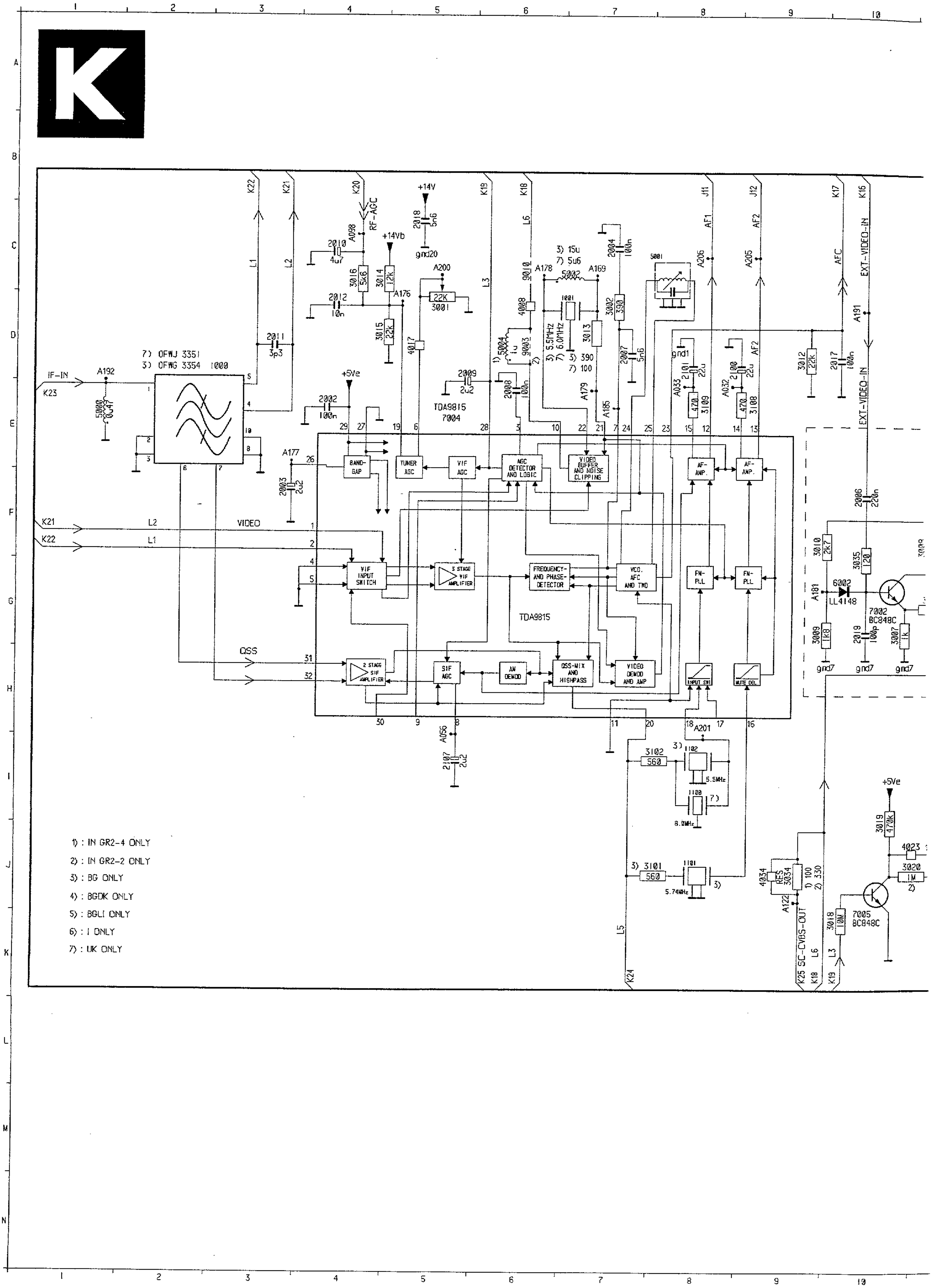

10
11
12
13
14
15
16
17
18
19
20
21
K8
K7
SC-AUDIO-IN-L
SC-AUDIO-IN-R
GR2-4 ONLY
+8Vb
7203
BC848C
A044
6206
LL4148
3222
82k
2237
22u
A035
2220
220u
A022
7202
BC858C
6207
LL4148
3223
33k
gnd5
gnd8
7208
BC848C
A043
6208
LL4148
3237
82k
2238
22u
A001
2221
220u
A039
7209
BC858C
6209
LL4148
3238
33k
9202
K6
K5
HEAD-PHONE-L
HEAD-PHONE-R
K4
K3
SDA
SCL
4207
K2
MUTE-2
6)
3)
3212
2226
2205
33n
2206
5n6
A054
2222
680n
L
A055
2223
680n
R
A114
A115
4203
4201
+14Vd
3208
180
A052
6202
LLZ-C8V2
2204
100n
2227
100u
A060
2217
100u
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
HEADPHONE CHANNEL VOLUME
MULTIPLE SOURCE AND MODE SELECTOR (CROSSBAR SWITCH)
REFERENCE VOLTAGE
Vref
+8V
GND
VOLUME CONTROL
STEREO
SPATIAL STEREO
PSEUDO STEREO
FORCED MONO
BASS CONTROL
TREBLE CONTROL
MUTE
VOLUME BALANCE
I²C-BUS CONTROL
2210
15n
2209
15n
2208
33n
2207
5n6
3231
1k2
3230
5k6
2218
47u
3218
1) 470k
2) 180k
3211
1)
2)
A045
4200
9201
A034
2235
220n
7201
BC84
3219
560k
3200
2219
4u7
A117
R-OUT
K15
6) +8Vc
3) +5Vc
7206
BC848C
7207
BC848C
A046
3233
1k
A038
3232
1k
6200
LL4148
6203
LL4148
gnd3
2230
22u
2231
22u
A112
A113
3221
56k
3220
56k
6201
LL4148
6204
LL4148
+8Va
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
K13
K14
K4
K3
SDA
SCL


21
22
23
24
25
26
27
28
J
K2
K1
MUTE-2
L-OUT
+8Va
7008
BC338
+8V
A063
3033
12
9002
+5V
+14Vc
3027
1k2
A175
6007
LLZ-F5V6
2015
100u
gnd3
gnd3
6) +8Vd
3) +5Vd
3212
3) 22k
6) 47k
+14Vd
2226
100u
gnd6
3230
5k6
3214
1) 2k2
2) 390
2218
47u
gnd5
3218
3211
1) 1k2
2) 150
2215
220u
gnd5
A045
2216
A116
4u7
1) 470k
2) 180k
034
2235
220n
7201
BC848C
3219
560k
3200
1) 1k
2) 150
gnd5
gnd5
+5Va
+5V
+5Vf
+5Ve
9012
9301
4031
4037
A003
A008
A011
+14Vb
+14Va
+14V
+14Vc
+14Vd
9013
9004
9020
9203
A009
A016
A012
A013
A014
9206:STEP-UP ONLY (GR2-4)
A002
4202
A004
gnd8
A019
9204
9209
A023
gnd5
gnd5
A020
9300
9205
A021
A010
gnd10
gnd3
4020
4033
4030
A025
gnd20
4304
A024
gnd20
gnd21
A007
A017
9016
gnd7
4100
gnd1
+8V
+8Vb
9206
2212
100n
A015
gnd5
K
4u7

1200	I 7
2015	E26
2200	G 4
2201	H 4
2202	I 5
2203	I 8
2204	I14
2205	F18
2206	F18
2207	J18
2208	I18
2209	J17
2210	J17
2211	H 5
2212	K28
2214	I 5
2215	G22
2216	H21
2217	J15
2218	G20
2219	I20
2220	D18
2221	E18
2222	F11
2223	F11
2224	F 4
2225	F 5
2226	G21
2227	I14
2228	J 7
2229	I 8
2230	J11
2231	J11
2232	E 8
2233	E 8
2234	E 8
2235	H20
2236	E 9
2237	D17
2238	E17
3027	E25
3033	D25
3200	I21
3207	F 4
3208	I14
3211	G21
3212	F21
3214	G22
3218	G20
3219	I20
3220	K11
3221	K11
3222	D17
3223	D17
3226	D 4
3227	D 5
3228	E 5
3229	E 4
3230	G21
3231	G20
3232	I12
3233	I11
3234	J 9
3237	E17
3238	F17
4020	J24
4030	K25
4031	G26
4033	J25
4037	G27
4100	K26
4200	H20
4201	G15
4202	I27
4203	G15
4204	D 4
4205	I 5
4206	D 5
4207	E19
4304	K25
5200	H 4
5201	H 4
6007	E26
6200	I11
6201	K13
6202	I14
6203	I12
6204	K13
6205	I 9
6206	C18
6207	D18
6208	E18
6209	F18
7008	D26
7201	H21
7202	D17
7203	C17
7204	G17
7205	F 6
7206	H11
7207	I11
7208	E17
7209	F17
9002	E25
9004	I25
9012	G25
9013	I24
9016	K26
9020	I25
9200	J 8
9201	H20
9202	F16
9203	I25
9204	I26
9205	J26
9206	K27
9207	K 9
9208	J 9
9209	I27
9300	J26
9301	G26
A001	E18
A002	I27
A003	G25
A004	I27
A005	J 8
A006	J 8
A007	K26
A008	G26
A009	I24
A010	J27
A011	H27
A012	I25
A013	I25
A014	I25
A015	K27
A016	I25
A017	K26
A019	I26
A020	J26
A021	J27
A022	C18
A023	I27
A024	K25
A025	K25
A026	I 6
A034	H20
A035	C18
A038	I11
A039	E18
A040	H 4
A043	E16
A044	C16
A045	H21
A046	I12
A054	F11
A055	F11
A060	I15
A062	I14
A063	D24
A071	H 5
A085	H 5
A112	J12
A113	J12
A114	G14
A115	H14
A116	H22
A117	I20
A175	E26

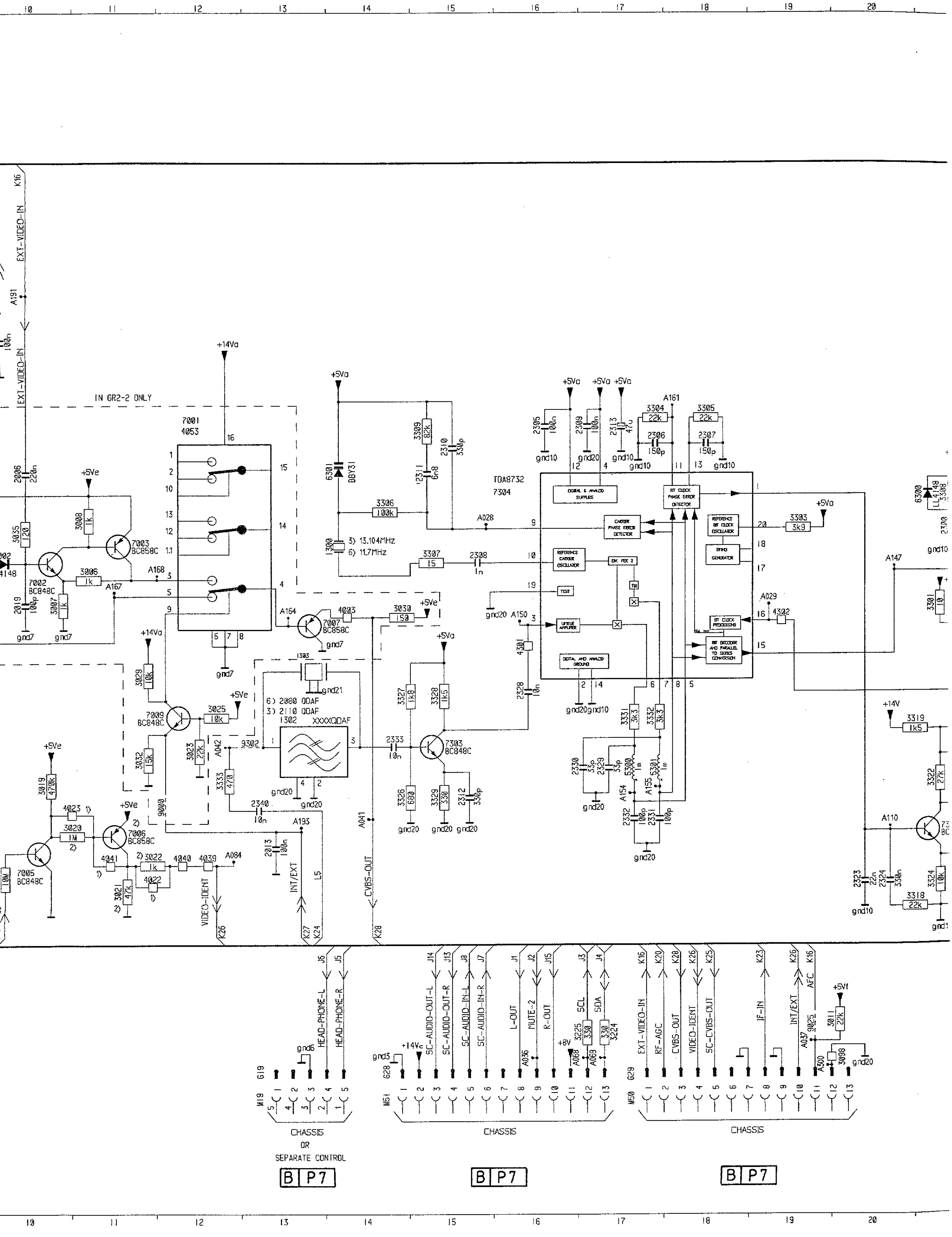
Nicam IF-Sound module/Nicam ZF-Ton module

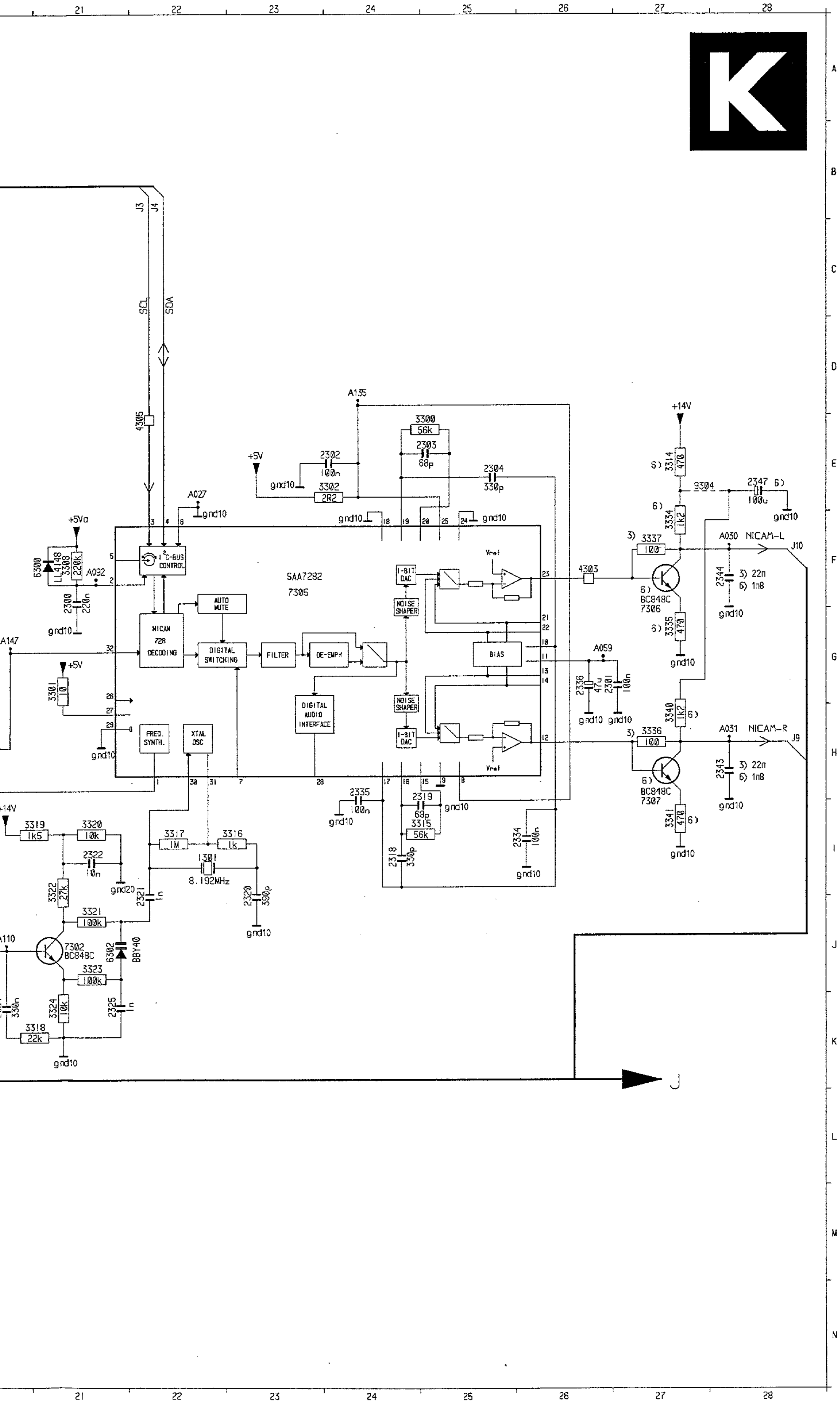
K


IF-IN
K23
A192
5000 0u47
7) OFWJ 3351
3) OFWG 3354 1000
2011 3p3
K22
K21
L1
L2
K20
RF-AGC
A098
2010 4u7
3016 5k6
+14Vb
3014 12k
A176
2012 10n
3015 22k
+14V
2018 5n6
gnd20
A200
22K 3001
4017
+5Ve
2002 100n
A177
2003 2u2
K19
L3
K18
L6
9010
A178
3) 15u
7) 5u6
5002
A169
4008
1001
3) 5.5MHz
7) 6.0MHz
3013
3) 390
7) 100
5004 1u
9003
2009 2u2
2008 100n
TDA9815
7004
A179
A185
2004 100n
3002 390
2007 5n6
5001
gnd1
A033
2101 22u
470 3109
A032
2100 22u
470 3108
J11
AF1
A206
J12
AF2
A205
K17
AFC
K16
EXT-VIDEO-IN
A191
3012 22K
2017 100n
2006 220n
3010 2K7
3035 120
A181
6002 LL4148
7002 BC848C
3009 1K8
2019 100p
3007 1k
gnd7
BAND-GAP
TUNER AGC
VIF AGC
AGC DETECTOR AND LOGIC
VIDEO BUFFER AND NOISE CLIPPING
AF-AMP.
VIDEO
VIF INPUT SWITCH
3 STAGE VIF AMPLIFIER
FREQUENCY- AND PHASE-DETECTOR
VCO, AFC AND TWD
FM-PLL
QSS
2 STAGE SIF AMPLIFIER
SIF AGC
AM DEMOD
QSS-MIX AND HIGHPASS
VIDEO DEMOD AND AMP
INPUT SWI
MUTE DEL
A056
2107 2u2
A201
3) 3102 560
1102 5.5MHz
1100 6.0MHz
3) 3101 560
1101 5.74MHz
L5
K24
4034 RES 3034
1) 100
2) 330
A122
K25 SC-CVBS-OUT
3018 10M
7005 BC848C
+5Ve
3019 470k
4023
3020 1M

1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
6) : I ONLY
7) : UK ONLY

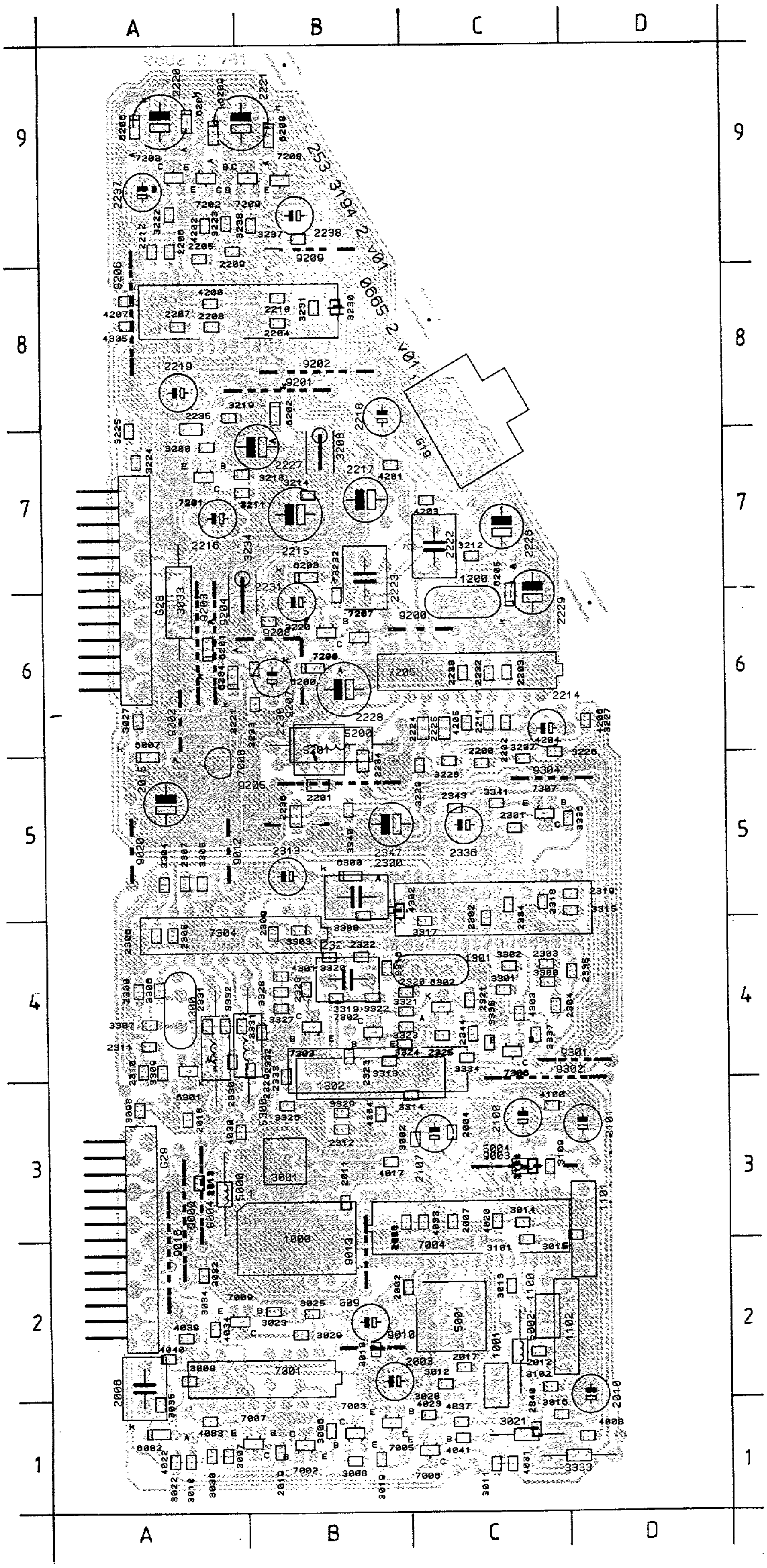
Module FI-Son Nicam


10
11
12
13
14
15
16
17
18
19
20
IN GR2-2 ONLY
7001
4053
+14Va
+5Va
6301
BBY31
1300
3) 13.104MHz
6) 11.7MHz
3309
82k
2310
330p
2311
6n8
3306
100k
3307
15
2308
1n
A028
TDA8732
7304
DIGITAL & ANALOG SUPPLIES
CARRIER PHASE ERROR DETECTOR
REFERENCE CARRIER OSCILLATOR
DIV. PER 2
TEST
LIMITER AMPLIFIER
DIGITAL AND ANALOG GROUND
BIT CLOCK PHASE ERROR DETECTOR
REFERENCE BIT CLOCK OSCILLATOR
TIMING GENERATOR
BIT CLOCK PROCESSING
BIT DECODER AND PARALLEL TO SERIES CONVERSION
2305
100n
2309
100n
2313
47u
A161
3304
22k
3305
22k
2306
150p
2307
150p
gnd10
gnd20
3303
3k9
A029
4302
A150
4301
2328
10n
3331
3k3
3332
3k3
2330
33p
2329
33p
5300
5301
A154
A155
2332
100p
2331
100p
7002
BC848C
7003
BC858C
3035
120
3008
1k
3006
1k
3007
1k
2019
100p
2006
220n
A168
A167
A164
4003
3030
150
7007
BC858C
+5Ve
+14Va
3029
10k
7009
BC848C
3025
10k
3032
15k
3023
22k
A042
9302
1303
gnd21
6) 2080 QDAF
3) 2110 QDAF
1302
XXXXQDAF
3333
470
2340
10n
A193
2013
100n
2333
10n
7303
BC848C
3327
1k8
3328
1k5
3326
680
3329
330
2312
330p
A041
9000
3019
470k
4023 1)
3020
1M
2)
7005
BC848C
7006
BC858C
4041
3022
1k
4040
4039
A084
4022
3021
47k
10M
VIDEO-IDENT
INT/EXT
L5
CVBS-OUT
K26
K27
K24
K28
EXT-VIDEO-IN
K16
A191
100n
6300
LL4148
3308
A147
3301
10
+14V
3319
1k5
3322
27k
A110
3324
10k
3318
22k
2323
22n
2324
330n
J6
J5
HEAD-PHONE-L
HEAD-PHONE-R
gnd6
G19
M19
CHASSIS
OR
SEPARATE CONTROL
B P7
J14
J13
J8
J7
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
J1
J2
J15
J3
J4
L-OUT
MUTE-2
R-OUT
SCL
SDA
+14Vc
gnd3
G28
M51
A036
+8V
A068
A069
3225
330
3224
330
CHASSIS
B P7
K16
K20
K28
K26
K25
EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
K23
IF-IN
K26
K16
INT/EXT
AFC
+5Vf
9025
3011
22k
A037
A300
3098
gnd20
G29
M50
CHASSIS
B P7


K
21
22
23
24
25
26
27
28
J3
J4
SCL
SDA
4305
A027
gnd10
+5Va
6300
LL4148
3308
220k
A092
2300
220n
A147
+5V
3301
10
A135
3300
56k
2303
68p
2302
100n
3302
2R2
2304
330p
SAA7282
7305
I²C-BUS CONTROL
AUTO MUTE
NICAM 728 DECODING
DIGITAL SWITCHING
FILTER
DE-EMPH
DIGITAL AUDIO INTERFACE
FREQ. SYNTH.
XTAL OSC
I-BIT DAC
NOISE SHAPER
BIAS
Vref
+14V
3314
470
9304
2347
100u
6)
3)
3334
1k2
3337
100
A030 NICAM-L
J10
4303
BC848C
7306
2344
3) 22n
6) 1n8
3335
470
A059
2336
47u
2301
100n
3340
1k2
3336
100
A031 NICAM-R
J9
BC848C
7307
2343
3341
470
2335
100n
2319
68p
3315
56k
2318
330p
2334
100n
+14V
3319
1k5
3320
10k
2322
10n
gnd20
3317
1M
3316
1k
1301
8.192MHz
2321
1n
2320
390p
3322
27k
3321
100k
A110
7302
BC848C
6302
BBY40
3323
100k
330n
3324
10k
2325
1n
3318
22k
J
A
B
C
D
E
F
G
H
I
J
K
L
M
N

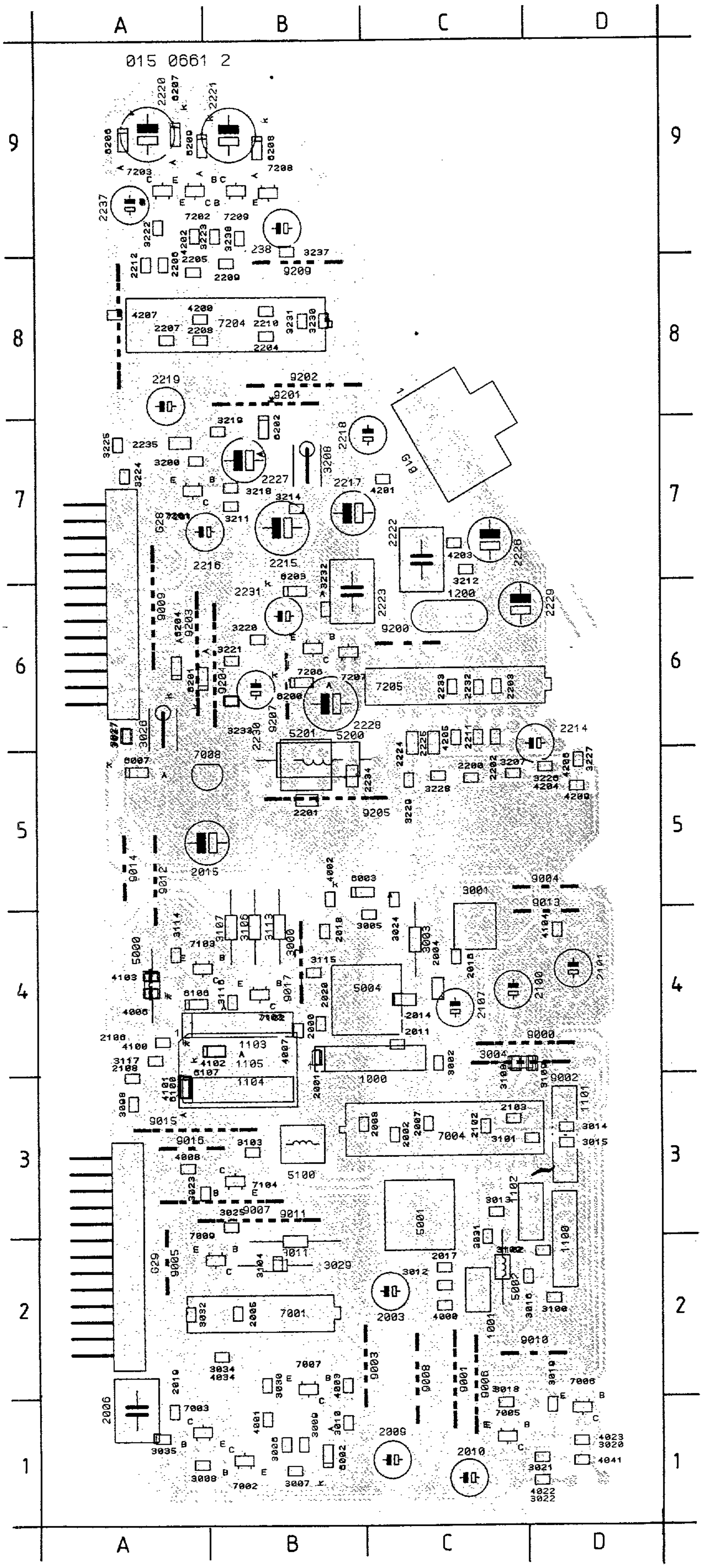
1000	D 2	7002	G10
1001	D 6	7003	G11
1100	I 8	7004	E 5
1101	J 8	7005	K10
1102	I 8	7006	J11
1300	G14	7007	H13
1301	I22	7009	I12
1302	I13	7302	J21
1303	H13	7303	I15
2002	E 4	7304	F15
2003	F 3	7305	F23
2004	C 7	7306	G27
2006	F10	7307	I27
2007	D 7	9000	J12
2008	E 6	9003	D 6
2009	D 5	9010	C 6
2010	C 4	9025	L19
2011	D 3	9302	I13
2012	D 4	9304	E27
2013	J13	A027	E22
2017	D10	A028	F15
2018	C 5	A029	G19
2019	G10	A030	F28
2100	D 8	A031	H28
2101	D 8	A032	E 8
2107	I 5	A033	E 8
2300	F21	A036	M16
2301	G26	A037	M19
2302	E24	A041	J14
2303	E25	A042	I12
2304	E25	A056	I 5
2305	E16	A059	G26
2306	E17	A068	M16
2307	E18	A069	M17
2308	G15	A084	J12
2309	E17	A092	F21
2310	E15	A098	C 4
2311	F15	A110	J20
2312	J15	A122	J 9
2313	E17	A135	D24
2318	I24	A147	G20
2319	H25	A150	G16
2320	I23	A154	J17
2321	I22	A155	J17
2322	I21	A161	E18
2323	K20	A164	G13
2324	K20	A167	G11
2325	K21	A168	G11
2328	H16	A169	C 7
2329	I17	A176	D 5
2330	I16	A177	E 3
2331	J17	A178	C 6
2332	J17	A179	E 7
2333	I14	A181	G 9
2334	I26	A185	E 7
2335	H24	A191	D10
2336	G26	A192	D 1
2340	J13	A193	J13
2343	H28	A200	C 5
2344	F28	A201	H 8
2347	E28	A205	C 9
3001	D 5	A206	C 8
3002	D 7	A300	M19
3006	G11	G19	M13
3007	G10	G19	M13
3008	F11	G19	M13
3009	G 9	G19	M13
3010	F 9	G19	M14
3011	L20	G28	M14
3012	D 9	G28	M15
3013	D 7	G28	M15
3014	C 4	G28	M15
3015	D 4	G28	M15
3016	C 4	G28	M15
3018	K10	G28	M16
3019	I10	G28	M16
3020	J11	G28	M16
3021	K11	G28	M16
3022	J11	G28	M16
3023	I12	G28	M17
3025	I12	G28	M17
3029	H11	G29	M17
3030	G14	G29	M17
3032	I11	G29	M18
3034	J 9	G29	M18
3035	F10	G29	M18
3098	M20	G29	M18
3101	J 8	G29	M18
3102	I 8	G29	M19
3108	E 9	G29	M19
3109	E 8	G29	M19
3224	L17	G29	M19
3225	L17	G29	M19
3300	E25	G29	M20
3301	G21		
3302	E24		
3303	F19		
3304	E17		
3305	E18		
3306	F14		
3307	G15		
3308	F21		
3309	E15		
3314	E27		
3315	I25		
3316	I23		
3317	I22		
3318	K21		
3319	I21		
3320	I21		
3321	J21		
3322	I21		
3323	J21		
3324	K21		
3326	J14		
3327	H14		
3328	H15		
3329	J15		
3331	I17		
3332	I17		
3333	I12		
3334	F27		
3335	G27		
3336	H27		
3337	F27		
3340	H27		
3341	I27		
4003	G14		
4008	D 6		
4017	D 5		
4022	K11		
4023	J10		
4034	J 9		
4039	J12		
4040	J12		
4041	J11		
4301	H16		
4302	G19		
4303	F26		
4305	E22		
5000	E 1		
5001	C 7		
5002	C 7		
5004	D 6		
5300	I17		
5301	I17		
6002	G10		
6300	F20		
6301	F14		
6302	J21		
7001	E12		

Nicam IF module



G28	C7
G29	C3
1000	B3
1001	A2
1100	A2
1101	A3
1102	A2
1200	A6
1300	C4
1301	A4
1302	B3
1303	B3
2002	B2
2003	B2
2004	A3
2006	C2
2007	A3
2008	B3
2009	B2
2010	A1
2011	B3
2012	A2
2013	C3
2015	C5
2017	A2
2018	C3
2019	B1
2100	A3
2101	A3
2107	A3
2200	A5
2201	B5
2202	A6
2203	A6
2204	B8
2205	C9
2206	C9
2207	C8
2208	C8
2209	C9
2210	B8
2211	A6
2212	C9
2214	A6
2215	B7
2216	C7
2217	B7
2218	B8
2219	C8
2220	C9
2221	C9
2222	A7
2223	B7
2224	A6
2225	A6
2226	A7
2227	C7
2228	B6
2229	A6
2230	B6
2231	B6
2232	A6
2233	A6
2234	B5
2235	C8
2236	B5
2237	C9
2238	B9
2300	B5
2301	A5
2302	A4
2303	A4
2304	A4
2305	C4
2306	C4
2307	C5
2308	C4
2309	B4
2310	C4
2311	C4
2312	B3
2313	B5
2318	A5
2319	A5
2320	B4
2321	A4
2322	B4
2323	B4
2324	B4
2325	A4
2328	B4
2329	C4
2330	C4
2331	C4
2332	C4
2333	B4
2334	A5
2335	A4
2336	A5
2340	A1
2343	A5
2344	A4
2347	B5
3001	B3
3002	B3
3006	B1
3007	C1
3008	B1
3009	C2
3010	C1
3011	A1
3012	A2
3013	A2
3014	A3
3015	A3
3016	A1
3018	B2
3019	B1
3020	A1
3021	A1
3022	C1
3023	B2
3025	B2
3027	C6
3029	B2
3030	C1
3032	C2
3033	C6
3034	C2
3035	C1
3098	C3
3101	A2
3102	A2
3108	A3
3109	A3
3200	C7
3207	A5
3208	B7
3211	C7
3212	A7
3214	B7
3218	C7
3219	C8
3220	B6
3221	C6
3222	C9
3223	C9
3224	C7
3226	A6
3227	A5
3228	A5
3229	B5
3230	B8
3231	B8
3232	B6
3233	C6
3234	C6
3237	B9
3238	C9
3300	A4
3301	A4
3302	A4
3303	B4
3304	C5
3305	C5
3306	C4
3307	C4
3308	B4
3309	C4
3314	B3
3315	A5
3316	B4
3317	A4
3318	B4
3319	B4
3320	B4
3321	B4
3322	B4
3323	B4
3324	B4
3326	B3
3327	B4
3328	B4
3329	B3
3331	C4
3332	C4
3333	A1
3334	A4
3335	A4
3336	A5
3337	A4
3340	B5
3341	A5
4003	C1
4008	A1
4017	B3
4020	A3
4022	C1
4023	A1
4030	C3
4031	A1
4033	B3
4034	C2
4037	A1
4039	C2
4040	C2
4041	A1
4100	A3
4200	C8
4201	B7
4202	C9
4203	A7
4204	A6
4205	A6
4206	A6
4301	B4
4302	B5
4303	A4
4304	B3
5000	C3
5001	A2
5002	A2
5004	A3
5200	B6
5201	B6
5300	C4
5301	C4
6002	C1
6007	C5
6200	B6
6201	C6
6202	B8
6203	B7
6204	C6
6205	A6
6206	C9
6207	C9
6208	B9
6209	C9
6300	B5
6301	C4
6302	A4
7001	C2
7002	B1
7003	B1
7004	A3
7005	B1
7006	A1
7007	C1
7008	C5
7009	C2
7201	C7
7202	C9
7203	C9
7204	C8
7205	A6
7206	B6
7207	B6
7208	B9
7209	C9
7302	B4
7303	B4
7304	C4
7305	A5
7306	A4
7307	A5
9000	C3
9002	C6
9003	A3
9004	C3
9010	B2
9012	C5
9013	B2
9016	C2
9025	A1
9200	B6
9201	B8
9202	B8
9203	C6
9204	C6
9205	B5
9207	B6
9208	B6
9209	B9
9300	B5
9301	A4
9302	A3
9304	A5

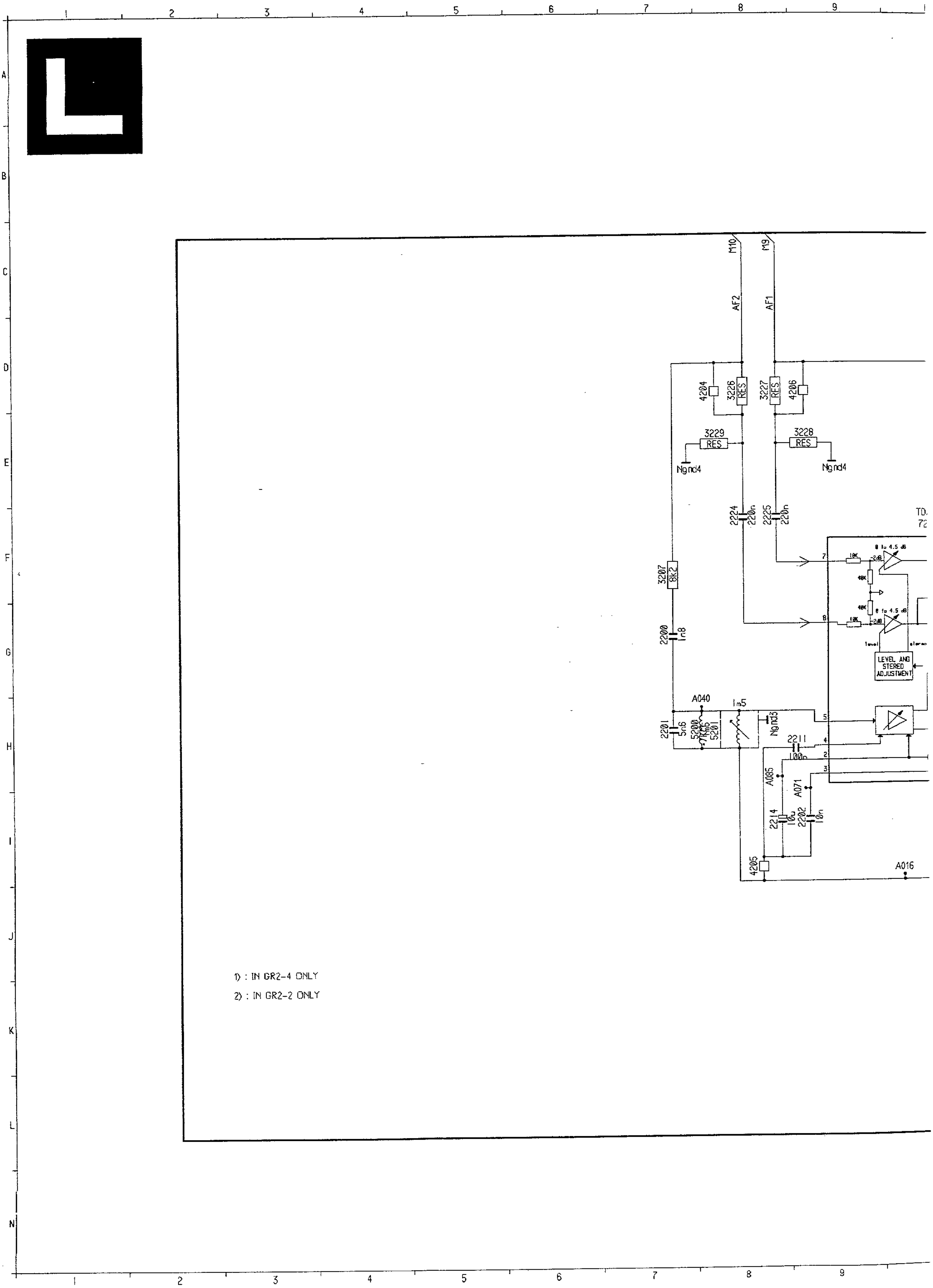
Stereo IF module



1000	C3
1001	B2
1100	A2
1101	A3
1102	B3
1103	C4
1104	C3
1105	C3
1200	B6
2000	C4
2001	C4
2002	B3
2003	B2
2004	B4
2005	C2
2006	D1
2007	B3
2008	C3
2009	B1
2010	B1
2011	B4
2014	B4
2015	D5
2016	B4
2017	B2
2018	C4
2019	D1
2020	C4
2100	B4
2101	A4
2102	B3
2103	B3
2106	D4
2107	B4
2108	D3
2200	B5
2201	C5
2202	B5
2203	B6
2204	C8
2205	D8
2206	D8
2207	D8
2208	D8
2209	C8
2210	C8
2211	B5
2212	D8
2214	B5
2215	C7
2216	D7
2217	C7
2218	C7
2219	D8
2220	D9
2221	C9
2222	B7
2223	C6
2224	B5
2225	B5
2226	B7
2227	C7
2228	C6
2229	B6
2230	C6
2231	C6
2232	B6
2233	B6
2234	C5
2235	D7
2237	D9
2238	C9
3000	C4
3001	B4
3002	B3
3003	B4
3004	B3
3005	C4
3006	C1
3007	C1
3008	D1
3009	C1
3010	C1
3011	C2
3012	B2
3013	B3
3014	A3
3015	A3
3016	B2
3018	B1
3019	A1
3020	A1
3021	B1
3022	B1
3023	D3
3024	B4
3025	C2
3026	D6
3027	D6
3029	C2
3030	C2
3031	B2
3032	D2
3034	D2
3035	D1
3098	D3
3100	A2
3101	B3
3102	B2
3103	C3
3104	C2
3106	C4
3107	C4
3108	B3
3109	B3
3113	C4
3114	D4
3115	C4
3116	C4
3117	D4
3200	D7
3207	B5
3208	C7
3211	C7
3212	B7
3214	C7
3218	C7
3219	C7
3220	C6
3221	C6
3222	D9
3223	C9
3224	D7
3225	D7
3226	A5
3227	A5
3228	B5
3229	B5
3230	C8
3231	C8
3232	C6
3233	C6
3237	C8
3238	C9
4000	B2
4001	C1
4002	C4
4003	C1
4006	D4
4007	C4
4008	D3
4022	B1
4023	A1
4034	D2
4041	A1
4100	D4
4101	D3
4102	D4
4103	D4
4104	A4
4200	D8
4201	B7
4202	D9
4203	B7
4204	A5
4205	B5
4207	D8
4209	A5
5000	D4
5001	B3
5002	B2
5004	C4
5100	C3
5200	C5
5201	C5
6002	C1
6003	C5
6007	D5
6100	D3
6106	D4
6107	D4
6200	C6
6201	D6
6202	C7
6203	C6
6204	D6
6206	D9
6207	D9
6208	C9
6209	D9
7001	C2
7002	C1
7003	D1
7004	B3
7005	B1
7006	A1
7007	C1
7008	D5
7009	D2
7102	C4
7103	D4
7104	C3
7201	D7
7202	D9
7203	D9
7204	C8
7205	B6
7206	C6
7207	C6
7208	C9
7209	C9
9000	B4
9001	B2
9002	B3
9003	C2
9004	A5
9005	D2
9006	B1
9007	C3
9008	B2
9009	D6
9010	B2
9011	C3
9012	D5
9013	A4
9014	D5
9015	D3
9016	D3
9017	C4
9200	B6
9201	C8
9202	C8
9203	D6
9204	D6
9205	C5
9206	D8
9207	C6
9209	C8
G19	B7
G28	D6
G29	D2

Stereo IF-Sound module/Stereo ZF-Ton module

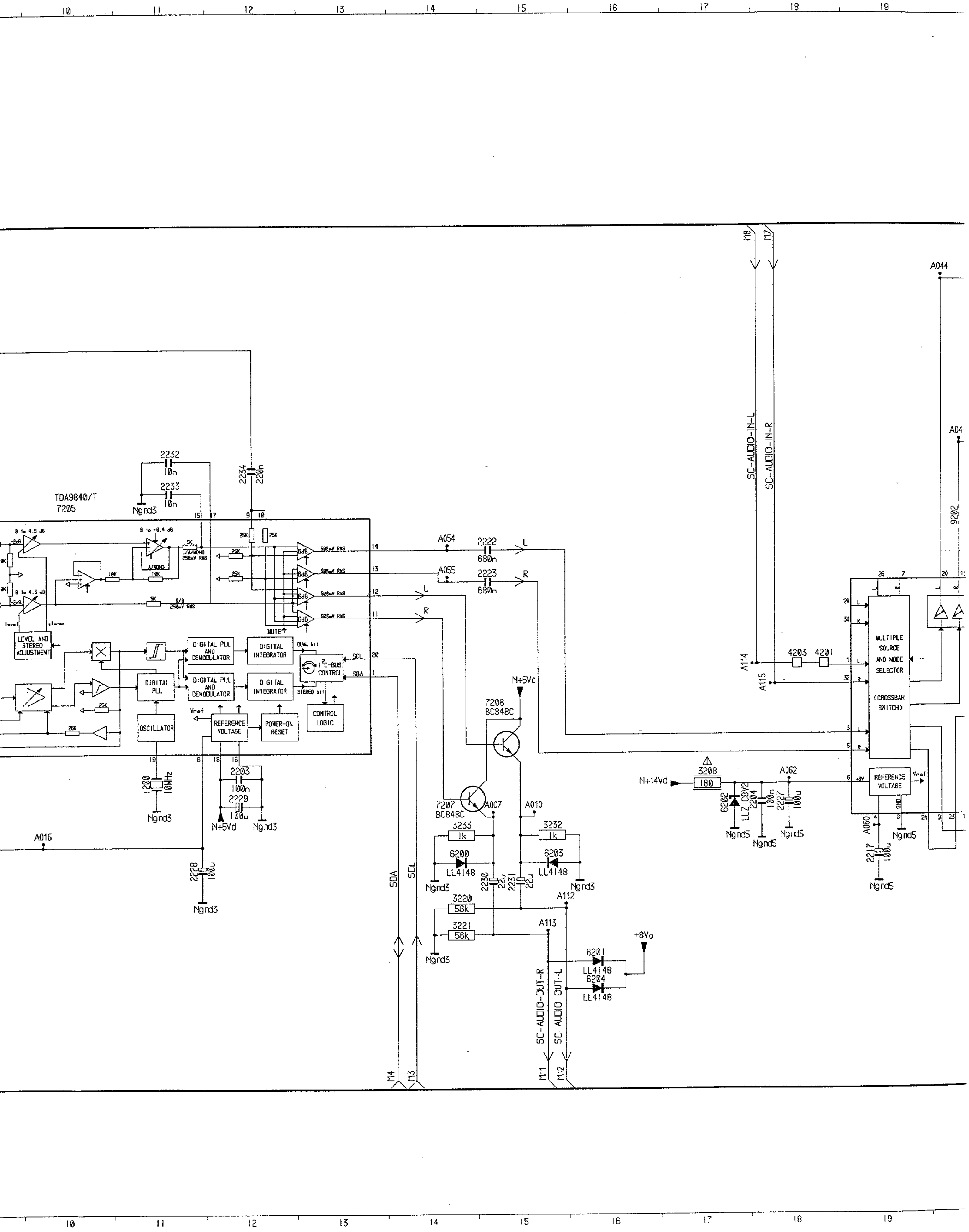
L

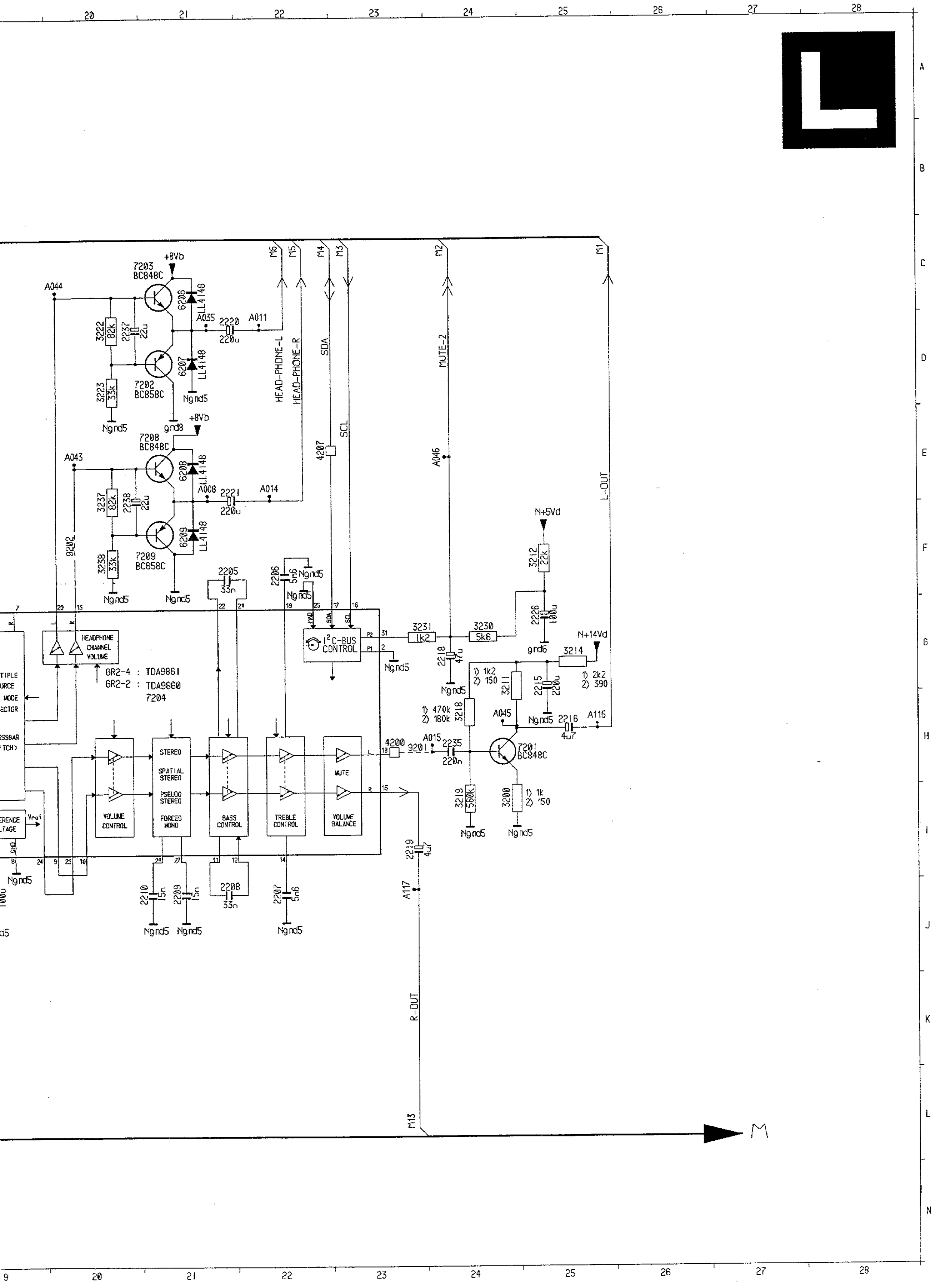

M10
M9
AF2
AF1
4204
3226 RES
3227 RES
4206
3229 RES
3228 RES
Ngnd4
Ngnd4
2224 220n
2225 220n
TD/
72
3207 8k2
2200 1n8
7
8
10K
40K
0 to 4.5 dB
level
stereo
LEVEL AND STEREO ADJUSTMENT
A040
1m5
2201 5n6
5200
5201
Ngnd3
5
4
2
3
2211 100n
A085
A071
2214 10u
2202 10n
4205
A016
1 2 3 4 5 6 7 8 9
A B C D E F G H I J K L N

1) : IN GR2-4 ONLY

2) : IN GR2-2 ONLY

Module FI-Son Stereo


10
11
12
13
14
15
16
17
18
19
TDA9840/T
7205
2232
10n
2233
10n
2234
220n
Ngnd3
LEVEL AND STEREO ADJUSTMENT
DIGITAL PLL AND DEMODULATOR
DIGITAL INTEGRATOR
DIGITAL PLL
OSCILLATOR
REFERENCE VOLTAGE
POWER-ON RESET
CONTROL LOGIC
I²C-BUS CONTROL
MUTE
DUAL bit
STEREO bit
SCL
SDA
Vref
500mV RMS
6dB
1200
10MHz
2203
100n
2229
100u
N+5Vd
A015
2228
100u
A054
2222
680n
A055
2223
680n
L
R
N+5Vc
7206
BC848C
7207
BC848C
A007
A010
3233
1k
3232
1k
6200
LL4148
6203
LL4148
2230
22u
2231
22u
3220
56k
3221
56k
A112
A113
+8Va
6201
LL4148
6204
LL4148
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
M11
M12
M4
M3
SDA
SCL
M8
M7
SC-AUDIO-IN-L
SC-AUDIO-IN-R
A114
A115
4203
4201
A044
A04
9202
N+14Vd
3208
180
A062
6202
LLZ-C8V2
2204
100n
2227
100u
Ngnd5
MULTIPLE SOURCE AND MODE SELECTOR
(CROSSBAR SWITCH)
REFERENCE VOLTAGE
A060
2217
100u
GND
+8V


L
19
20
21
22
23
24
25
26
27
28
A
B
C
D
E
F
G
H
I
J
K
L
N
+8Vb
7203
BC848C
A044
6206
LL4148
A035
2220
220u
A011
3222
82k
2237
22u
7202
BC858C
6207
LL4148
Ngnd5
3223
33k
Ngnd5
gnd8
HEAD-PHONE-L
HEAD-PHONE-R
M6
M5
M4
M3
M2
M1
SDA
SCL
MUTE-2
4207
A046
L-OUT
+8Vb
7208
BC848C
A043
6208
LL4148
A008
2221
220u
A014
3237
82k
2238
22u
7209
BC858C
6209
LL4148
3238
33k
9202
Ngnd5
Ngnd5
2205
33n
2206
5n6
Ngnd5
Ngnd5
N+5Vd
3212
22k
2226
100u
gnd6
N+14Vd
3214
1) 2k2
2) 390
3231
1k2
3230
5k6
2218
47u
Ngnd5
1) 1k2
2) 150
3211
2215
220u
Ngnd5
2216
4u7
A116
A045
1) 470k
2) 180k
3218
4200
9201
A015
2235
220n
7201
BC848C
3219
560k
3200
1) 1k
2) 150
Ngnd5
Ngnd5
HEADPHONE
CHANNEL
VOLUME
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
I²C-BUS
CONTROL
Ngnd5
TIPLE
URCE
MODE
ECTOR
OSSBAR
ITCH)
ERENCE
LTAGE
Vref
GND
VOLUME
CONTROL
STEREO
SPATIAL
STEREO
PSEUDO
STEREO
FORCED
MONO
BASS
CONTROL
TREBLE
CONTROL
MUTE
VOLUME
BALANCE
7
20
13
22
21
19
25
17
16
31
2
P2
P1
18
15
8
24
9
23
10
29
27
11
12
14
Ngnd5
2210
15n
2209
15n
2208
33n
2207
5n6
Ngnd5
Ngnd5
Ngnd5
2219
4u7
A117
R-OUT
M13
M

1200	I11
2200	G 7
2201	H 7
2202	I 9
2203	I12
2204	I18
2205	F21
2206	F22
2207	J22
2208	J21
2209	J21
2210	J21
2211	H 9
2214	I 8
2215	G25
2216	H25
2217	J19
2218	G24
2219	I23
2220	D21
2221	E21
2222	F15
2223	G15
2224	F 8
2225	F 8
2226	G25
2227	I18
2228	J11
2229	I12
2230	J15
2231	J15
2232	E11
2233	F11
2234	E12
2235	H24
2237	D20
2238	E20
3200	I24
3207	F 7
3208	I17
3211	G24
3212	F25
3214	G25
3218	H24
3219	I24
3220	J14
3221	J14
3222	D20
3223	D20
3226	D 8
3227	D 8
3228	E 9
3229	E 8
3230	G24
3231	G23
3232	I15
3233	I14
3237	E20
3238	F20
4200	H23
4201	G18
4203	G18
4204	D 8
4205	I 8
4206	D 9
4207	E22
5200	H 8
5201	H 8
6200	J14
6201	K16
6202	I17
6203	J15
6204	K16
6206	C21
6207	D21
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6209	F21
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7205	F10
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7207	I14
7208	E20
7209	F20
9201	H23
9202	F20
A007	I15
A008	E21
A010	I15
A011	D22
A014	E22
A015	H24
A016	I10
A035	D21
A040	H 8
A043	E20
A044	C20
A045	H24
A046	E24
A054	F14
A055	F14
A060	I19
A062	I18
A071	I 9
A085	H 8
A112	J15
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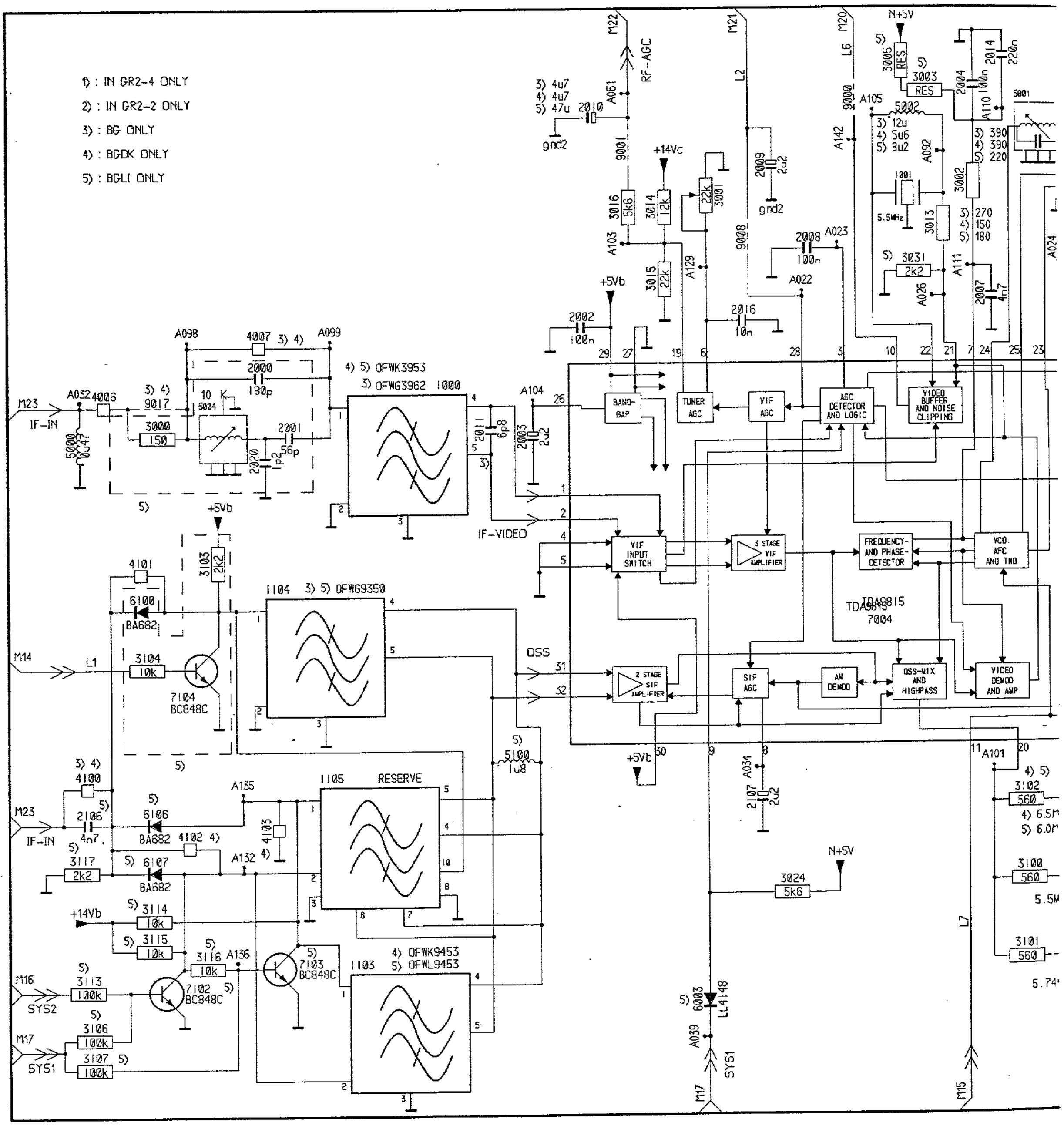
A117	J23

Stereo IF-Sound module/Stereo ZF-Ton module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2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
M22
RF-AGC
A061
3) 4u7
4) 4u7
5) 47u
2010
gnd2
9001
+14Vc
3016
5k6
3014
12k
3001
22k
A103
3015
22k
A129
M21
L2
2009
2u2
gnd2
9008
2008
100n
A023
A022
M20
L6
9000
A142
A105
N+5V
3005
RES
3003
RES
2004
100n
2014
220n
A110
5002
3) 12u
4) 5u6
5) 8u2
A092
1001
5.5MHz
3013
3002
3) 390
4) 390
5) 220
3) 270
4) 150
5) 180
3031
2k2
A111
A026
2007
4n7
A024
+5Vb
2002
100n
2016
10n
A098
4007 3) 4)
A099
2000
180p
4) 5) OFWK3953
3) OFWG3962 1000
M23
IF-IN
A032
4006
9017
3000
150
5004
2001
56p
2020
1p2
5000
0.47
2011
6p8
2003
2u2
A104
IF-VIDEO
BAND-GAP
TUNER AGC
VIF AGC
AGC DETECTOR AND LOGIC
VIDEO BUFFER AND NOISE CLIPPING
VIF INPUT SWITCH
3 STAGE VIF AMPLIFIER
FREQUENCY- AND PHASE-DETECTOR
VCO, AFC AND TWD
TDA9815
7004
+5Vb
3103
2k2
4101
6100
BA682
1104 3) 5) OFWG9350
M14
L1
3104
10k
7104
BC848C
QSS
2 STAGE SIF AMPLIFIER
SIF AGC
AM DEMOD
QSS-MIX AND HIGHPASS
VIDEO DEMOD AND AMP
5100
1u8
+5Vb
A034
2107
2u2
A101
3102
560
4) 6.5M
5) 6.0M
3100
560
5.5M
3101
560
5.74
3) 4)
4100
M23
IF-IN
2106
4n7
6106
BA682
4102 4)
A135
1105 RESERVE
4103
A132
3117
2k2
6107
BA682
+14Vb
3114
10k
3115
10k
3116
10k
A136
7103
BC848C
4) OFWK9453
5) OFWL9453
1103
M16
SYS2
3113
100k
7102
BC848C
M17
SYS1
3106
100k
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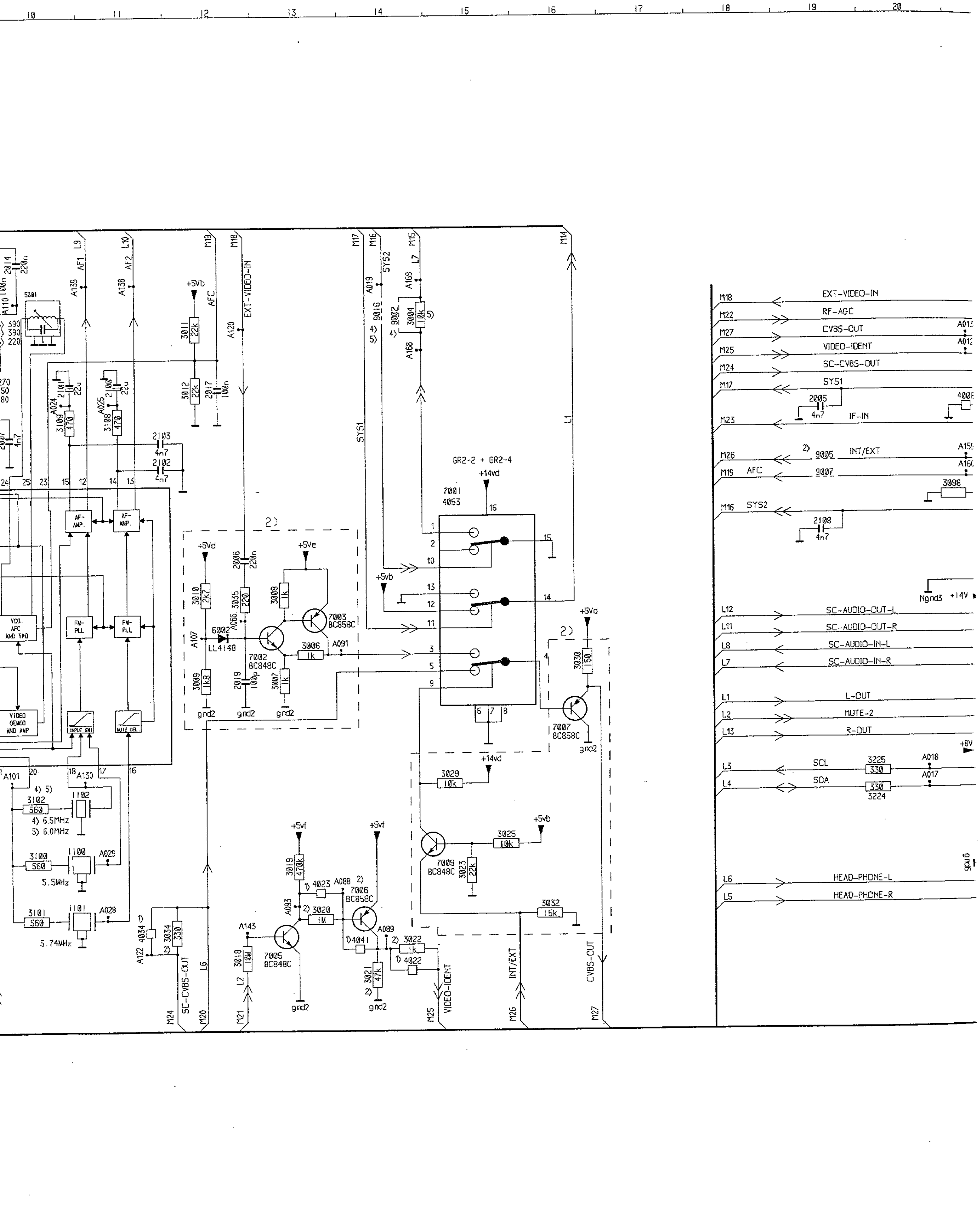
3024
5k6
6003
LL4148
A039
SYS1
M17
L7
M15

Module FI-Son Stereo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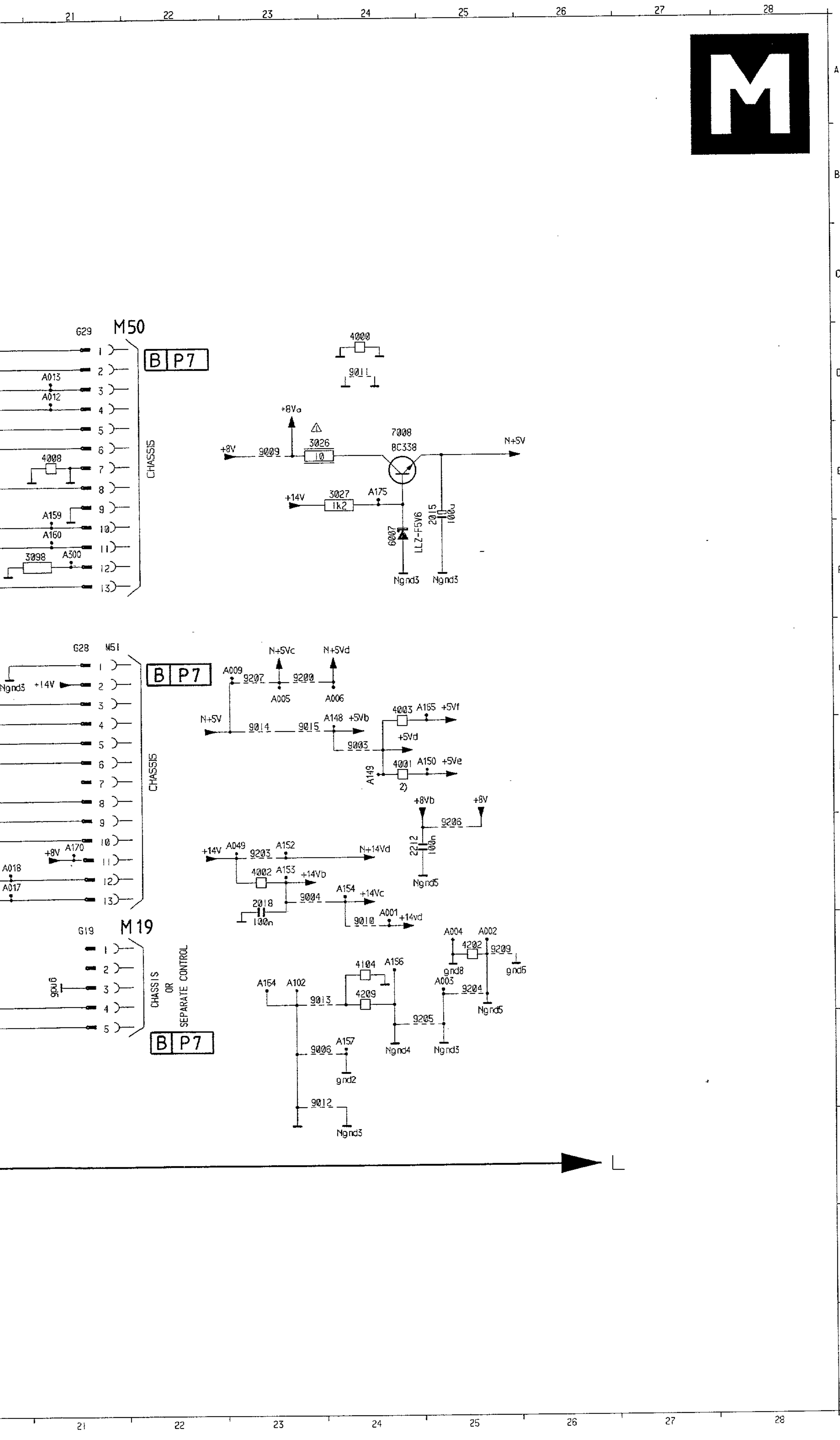
20
L9 AF1 A139
L10 AF2 A138
M19 AFC
M18 EXT-VIDEO-IN A120
M17 M16 SYS2 A019 9016 9002
M15 L7 A169 3004 10k A168
M14 L1
2014 220n
A110 100n
5001
2101 22u A024 3109 470
2100 22u A025 3108 470
+5Vb 3011 22k 3012 22k 2017 100n
2103 4n7
2102 4n7
AF-AMP.
FM-PLL
VCO. AFC AND TNO
VIDEO DEMOD AND AMP
INPUT SWI
MUTE DEL.
24 25 23 15 12 14 13
20 18 17 16
A101 A130
3102 560 1102 4) 6.5MHz 5) 6.0MHz
3100 560 1100 A029 5.5MHz
3101 560 1101 A028 5.74MHz
SYS1
GR2-2 + GR2-4
+14vd
7001 4053
1 2 10 13 12 11 3 5 9 16 15 14 4 6 7 8
+5Vd 3010 2k7 2006 220n +5Ve 3035 220 3008 1k 7003 BC858C
A107 6002 LL4148 A066 7002 BC848C 3006 1k A091
3009 1k8 2019 100p 3007 1k gnd2
+5Vb
+5Vd 3030 150 7007 BC858C gnd2
3029 10k +14vd
7009 BC848C 3023 22k 3025 10k +5vb
3032 15k
+5Vf 3019 470k 4023 A088 7006 BC858C A093 3020 1M A089
A143 7005 BC848C 3018 10M
4041 3022 1k 4022 3021 47k gnd2
A122 4034 3034 330
SC-CVBS-OUT L6 L2 VIDEO-IDENT INT/EXT CVBS-OUT
M24 M20 M21 M25 M26 M27
M18 EXT-VIDEO-IN
M22 RF-AGC
M27 CVBS-OUT A013
M25 VIDEO-IDENT A012
M24 SC-CVBS-OUT
M17 SYS1
2005 4n7 4008
M23 IF-IN
M26 9005 INT/EXT A159
M19 AFC 9007 A160
3098
M16 SYS2
2108 4n7
Ngnd3 +14V
L12 SC-AUDIO-OUT-L
L11 SC-AUDIO-OUT-R
L8 SC-AUDIO-IN-L
L7 SC-AUDIO-IN-R
L1 L-OUT
L2 MUTE-2
L13 R-OUT
+8V
L3 SCL 3225 330 A018
L4 SDA 330 3224 A017
L6 HEAD-PHONE-L
L5 HEAD-PHONE-R
gpu6


M
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G29
M50
B P7
CHASSIS
A013
A012
4008
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A160
3098
A300
4000
9011
+8Va
⚠
3026
10
7008
BC338
N+5V
+8V
9009
+14V
3027
1K2
A175
2015
100µ
6007
LLZ-F5V6
Ngnd3
Ngnd3
G28
M51
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+14V
N+5Vc
N+5Vd
A009
9207
9200
A005
A006
N+5V
9014
9015
A148
+5Vb
4003
A165
+5Vf
+5Vd
9003
A149
4001
A150
+5Ve
2)
+8Vb
+8V
9206
2212
100n
Ngnd5
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A170
A018
A017
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A049
9203
A152
N+14Vd
4002
A153
+14Vb
2018
100n
9004
A154
+14Vc
9010
A001
+14vd
G19
M19
gnd6
CHASSIS
OR
SEPARATE CONTROL
B P7
A004
A002
4202
9209
gnd8
gnd5
A003
A164
A102
4104
A156
4209
9013
9204
Ngnd5
9205
9006
A157
gnd2
Ngnd4
Ngnd3
9012
Ngnd3
L
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
K
L
M
N

1000	F 5	A001	I24
1001	D 9	A002	J25
1100	J10	A003	J25
1101	K10	A004	J25
1102	I10	A005	G23
1103	K 4	A006	G24
1104	H 4	A009	G23
1105	I 4	A012	D21
2000	F 4	A013	D21
2001	F 4	A017	I20
2002	E 6	A018	I20
2003	F 6	A019	C14
2004	C 9	A022	E 8
2005	E19	A023	E 8
2006	G12	A024	E10
2007	E10	A025	E11
2008	E 8	A026	E 9
2009	D 8	A028	K11
2010	D 6	A029	J11
2011	F 5	A032	F 2
2014	C10	A034	I 8
2015	E25	A039	K 7
2016	E 8	A049	I23
2017	E12	A061	C 7
2018	I23	A066	G12
2019	H12	A088	J13
2020	G 4	A089	K14
2100	E11	A091	H13
2101	E10	A092	D 9
2102	E11	A093	K13
2103	E11	A098	E 3
2106	J 2	A099	E 4
2107	I 8	A101	I10
2108	F19	A102	J23
2212	I24	A103	E 7
3000	F 3	A104	F 6
3001	D 7	A105	D 9
3002	D 9	A107	H12
3003	C 9	A110	D10
3004	D14	A111	E 9
3005	C 9	A120	D12
3006	H13	A122	K11
3007	H13	A129	E 7
3008	G13	A130	I11
3009	H12	A132	J 3
3010	G12	A135	I 3
3011	D12	A136	K 3
3012	E12	A138	C11
3013	E 9	A139	C10
3014	D 7	A142	D 8
3015	E 7	A143	K12
3016	D 7	A148	G24
3018	K12	A149	H24
3019	J13	A150	H25
3020	K13	A152	I23
3021	K14	A153	I23
3022	K14	A154	I24
3023	J15	A156	J24
3024	J 8	A157	K24
3025	J15	A159	E21
3026	E23	A160	F21
3027	E24	A164	J23
3029	I15	A165	G25
3030	H16	A168	D14
3031	E 9	A169	C14
3032	K16	A170	I21
3034	K12	A175	E24
3035	G12	A300	F21
3098	F21	G19	J21
3100	J10	G19	K21
3101	K10	G19	J21
3102	I10	G19	J21
3103	G 3	G19	J21
3104	H 3	G28	G21
3106	K 2	G28	I21
3107	L 2	G28	H21
3108	E11	G28	H21
3109	E10	G28	H21
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3114	J 3	G28	H21
3115	K 3	G28	G21
3116	K 3	G28	G21
3117	J 2	G28	G21
3224	I20	G28	I21
3225	I20	G28	I21
4000	D24	G28	I21
4001	H24	G29	D21
4002	I23	G29	F21
4003	G24	G29	F21
4006	F 2	G29	F21
4007	F 4	G29	E21
4008	E21	G29	E21
4022	K14	G29	E21
4023	J13	G29	E21
4034	K11	G29	E21
4041	K14	G29	D21
4100	I 2	G29	D21
4101	G 3	G29	D21
4102	J 3	G29.	D21
4103	J 4		
4104	J24		
4202	J25		
4209	J24		
5000	F 2		
5001	D10		
5002	D 9		
5004	F 3		
5100	I 6		
6002	G12		
6003	K 7		
6007	F24		
6100	H 3		
6106	J 3		
6107	J 3		
7001	F15		
7002	H12		
7003	G13		
7004	H 9		
7005	K13		
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7009	J15		
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9000	D 9		
9001	D 7		
9002	D14		
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9004	I23		
9005	E19		
9006	K23		
9007	F19		
9008	E 8		
9009	E23		
9010	J24		
9011	D24		
9012	K23		
9013	J23		
9014	H23		
9015	H23		
9016	D14		
9017	F 3		
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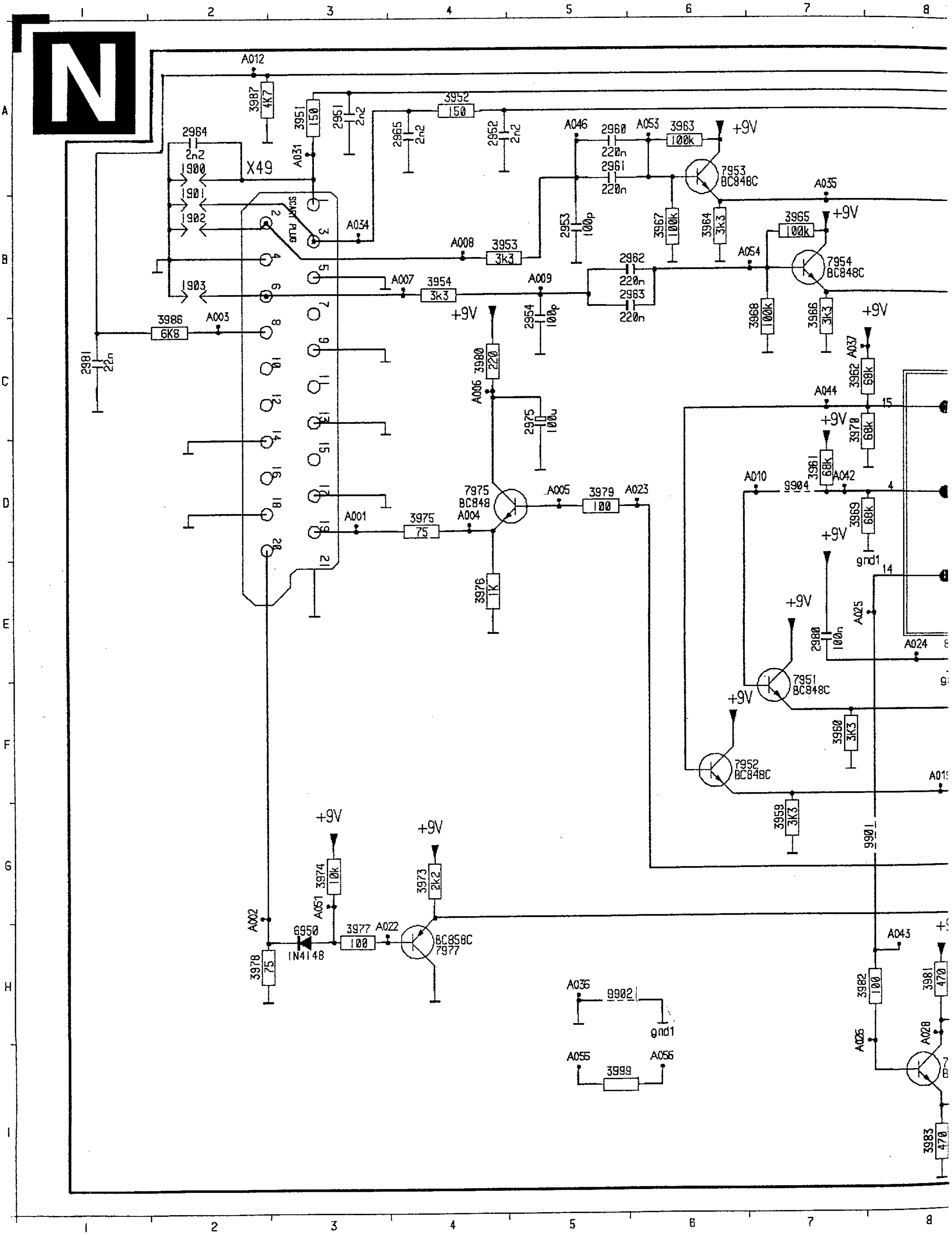
9207	G23		
9209	J25		

Third scart module


N
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C
D
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G
H
I
A012
3987
4K7
3951
150
2951
2n2
3952
150
2965
2n2
2952
2n2
2964
2n2
1900
1901
1902
1903
X49
A031
SCART PLUG
A034
A046
2960
220n
A053
3963
100k
+9V
2961
220n
7953
BC848C
A035
2953
100p
3967
100k
3964
3k3
3965
100k
7954
BC848C
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A054
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2963
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A007
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A009
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100k
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3k3
3986
6K8
A003
2981
22n
3980
220
A006
2975
100u
3962
68k
A037
A044
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68k
3961
68k
A042
A010
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gnd1
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A023
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75
A004
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3K3
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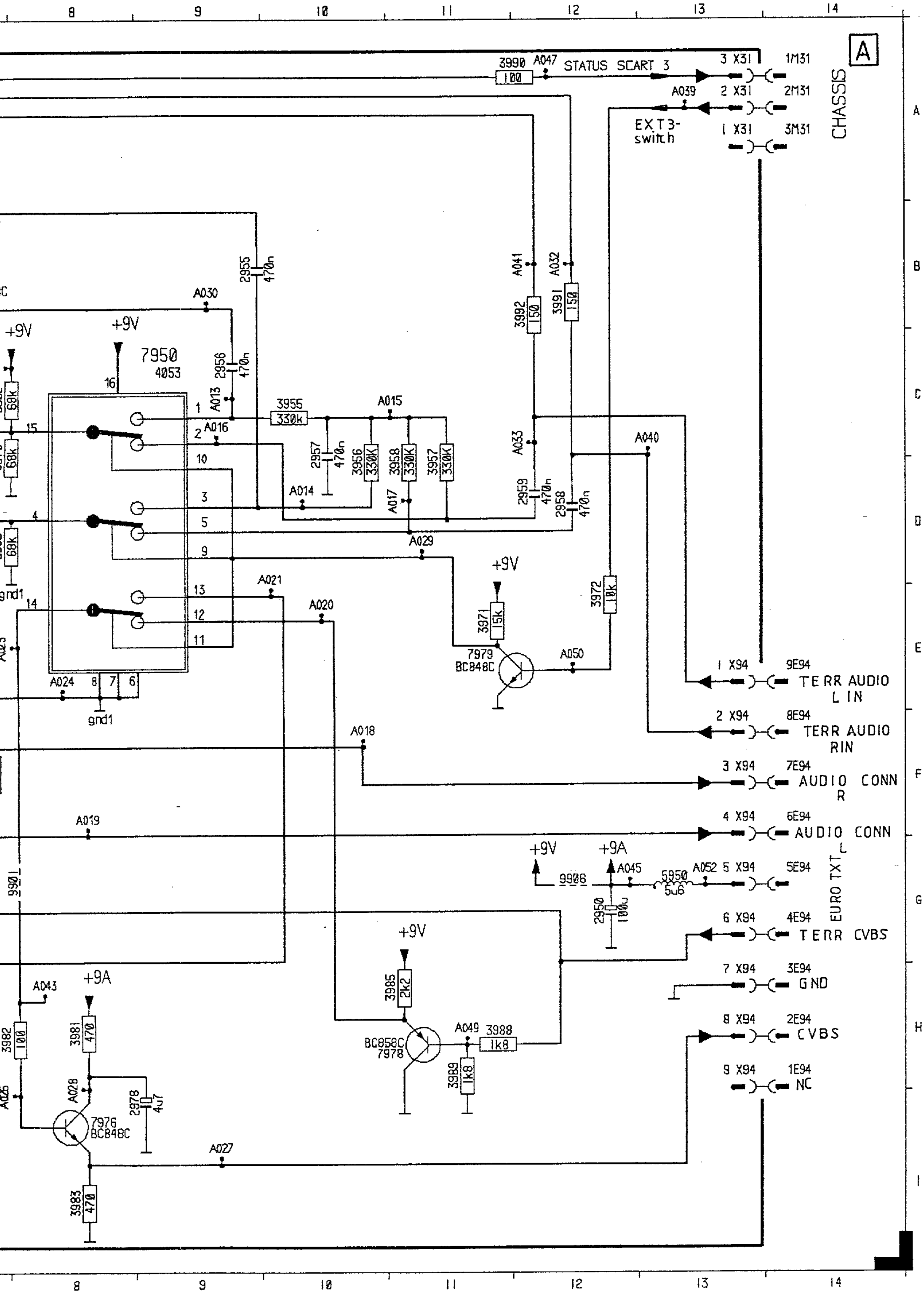
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2 X31
2M31
EXT3-
switch
1 X31
3M31
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A041
A032
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3991
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A030
+9V
+9V
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16
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470n
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68k
68k
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15k
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BC848C
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A024
8
7
6
gnd1
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9E94
TERR AUDIO
L IN
2 X94
8E94
TERR AUDIO
RIN
A018
3 X94
7E94
AUDIO CONN
R
A019
4 X94
6E94
AUDIO CONN
L
+9V
+9A
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5u6
A052
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5E94
EURO TXT
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100u
9901
6 X94
4E94
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+9V
7 X94
3E94
GND
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470
A049
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8 X94
2E94
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1E94
NC
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A028
2978
4u7
7976
BC848C
A027
3983
470
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A
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E
F
G
H
I

1900	A 2
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1902	B 2
1903	B 2
2950	G12
2951	A 3
2952	A 4
2953	B 5
2954	C 5
2955	B 9
2956	C 9
2957	C10
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2960	A 5
2961	A 5
2962	B 6
2963	B 6
2964	A 2
2965	A 4
2975	C 5
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3952	A 4
3953	B 4
3954	B 4
3955	C10
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3970	C 7
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3989	H11
3990	A12
3991	B12
3992	B12
3999	I 5
5950	G13
6950	H 3
7950	C 9
7951	F 7
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7976	I 8
7977	H 4
7978	H11
7979	E11
9901	G 8
9902	H 5
9904	D 7
9906	G12
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A002	G 2
A003	C 2
A004	D 4
A005	D 5
A006	C 4
A007	B 4
A008	B 4
A009	B 5
A010	D 7
A012	A 2
A013	C 9
A014	D10
A015	C11
A016	C 9
A017	D11
A018	F10
A019	F 8
A020	E10
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A025	E 7
A026	I 7
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A028	H 8
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A034	B 3
A035	A 7
A036	H 5
A037	C 7
A039	A13
A040	C13
A041	B12
A042	D 7
A043	H 8
A044	C 7
A045	G12
A046	A 5
A047	A12
A049	H11
A050	E12
A051	G 3
A052	G13
A053	A 6
A054	B 7
A055	I 5
A056	I 6
X31	A13
X31	A13
X31	A13
X49	A 2
X94	E13
X94	F13
X94	F13
X94	F13
X94	G13
X94	G13
X94	H13
X94	H13
X94	H13

7. Electrical adjustments

Setting conditions

All electrical settings should be made under the following conditions:

- * supply voltage: 220 - 240 V ± 10%; 50 Hz ± 5%
- * warming-up time ≈ 10 minutes
- * the voltages and oscillograms have been measured with regard to tuner earth.
- * measuring probe: Ri > 10 MΩ; Ci < 2.5 pF.

1. Settings on the carrier board

1.1 +148V/+95V supply voltage

Connect a voltmeter over C2631. Using R3635, set the supply voltage to +148V ± 0.5V for 25" and 28" units or to 95V ± 0.5V for 21" units.

1.2 Focusing

This is set using the focusing potentiometer (on the top of the line output transformer).

1.3 Vg2 setting

Connect a pattern generator and supply a blanking frame signal (black picture). Switch the unit to the service default mode (see section 9).
Connect an oscilloscope to the emitters of transistors 7304 and 7364 on the picture tube module. Set the oscilloscope to frame frequency. Measure the DC voltage level of the measuring pulses (see Fig. 7.2).
Using the Vg2 potentiometer on the line output transformer, set the measuring pulse with the lowest DC voltage level to:

- * +130V ± 5V for all sets.

1.4 Horizontal synchronization

Connect pin 5-IC7470 to pin 9-IC7470.
Supply an aerial signal and tune the set.
Adjust in service menu(see section 9), sync.freq.by means of the menu +/- button until the picture is straight. Remove the interconnection.

1.5 Horizontal centring

Set using potentiometer 3461.

1.6 Vertical centring

Set using potentiometer 3516.

1.7 Picture height

Set using potentiometer 3504.

1.8 Picture width

Set using potentiometer 3525.

1.9 East/west correction

Is adjusted with potentiometer 3521

1.10 Chroma bandpass filter

a. Setting for PAL/SECAM sets (TDA4657)

Connect a signal generator (e.g. PM 5138) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.286 MHz/0.5 Vpp. Switch the unit to EXT1.
Connect pin 18-IC7306 to +12V. Connect an oscilloscope to pin 9-IC7306.
Set 5301 to maximum amplitude.
Remove the interconnection.

b. Setting for PAL sets (TDA4510)

Connect a signal generator (e.g. PM 5138) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.436 MHz/0.5Vpp. Connect the unit to EXT1.
Connect an oscilloscope to pin 9-IC7305 (TDA4510).
Set 5301 to maximum amplitude

1.11 Chroma auxiliary oscillator

Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 11-IC7305 (TDA4510) to earth. Set 2313 so that the colour on the screen has practically stopped. Remove the interconnection.

1.12 White balance

Connect a pattern generator and select a white picture. Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set the value of "Green" to 50(G/AMP), and the Value of "Blue" to 45(B/AMP). Value of "Red" to 57(R/AMP).
In most cases no futher adjustments are required.

1.13 Peak white limiter

Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set "WH/LIM" to the value:

- 35 for blackline units
- 51 for non-blackline units
- 63 for 21" 110 degree sets.
- 45 for 29" sets

1.14 Cut-off points of the picture tube

Connect a pattern generator and select a black picture. Switch on the service menu (see section 9) and select "CUT OFF".
Set the value of "Red" to 30, and fore "Green" to 30, and for "Blue" to 30. In most cases no futher adjustments are required.

1.15 Options

Switch on the service menu and select "OPTIONS" or "OPTION 1".
Switch the options "ON" and "OFF" according to whether the following options are present:

- "THIRD SCART" on a set with third scart.
- "TELETEXT" on a teletext set
- "MULTI SYSTEM" for multisystem sets
- "UHF ONLY" for a tuner which can only be tuned to the UHF band
- "NICAM" for stereo sets which can also receive NICAM sound.

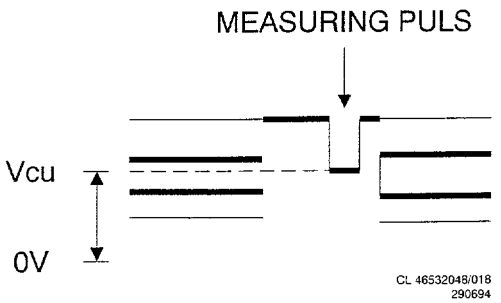


Fig. 7.2

2.1 RF-AGC
If the picture from a strong local transmitter is distorted, adjust 3016 until the picture is not distorted.

2.2a MF-AFC For multi system sets (PAL-BG/SECAM-DK).
Connect a pattern generator to pin 8 of connector G29 (IF-module) and select a frequency of 38,9 MHz. Connect a voltmeter to pin 11 of connector G29.
Adjust with 5001 the DC voltage to 1.9 V.

2.2b MF-AFC For all other sets.
Connect a pattern generator to pin 8 of connector G29 (IF-module) and select a frequency of 38,9 MHz. Connect a voltmeter to pin 11 of connector G29.
Adjust with 5001 the DC voltage to 2.3 V.

2.3 Stereo matrix
Connect a pattern generator and supply a PAL BG signal with stereo sound. Select only the right-hand channel sound. Go into service mode. Choose SND stereo and pull out the right connector (seen from the front side of the set). Put volume maximum with volume button. Align with menu-button so that the sound is just not hearable in the left loudspeaker. Leave now the service mode by putting the set in standby.

8. Survey of error messages on the screen

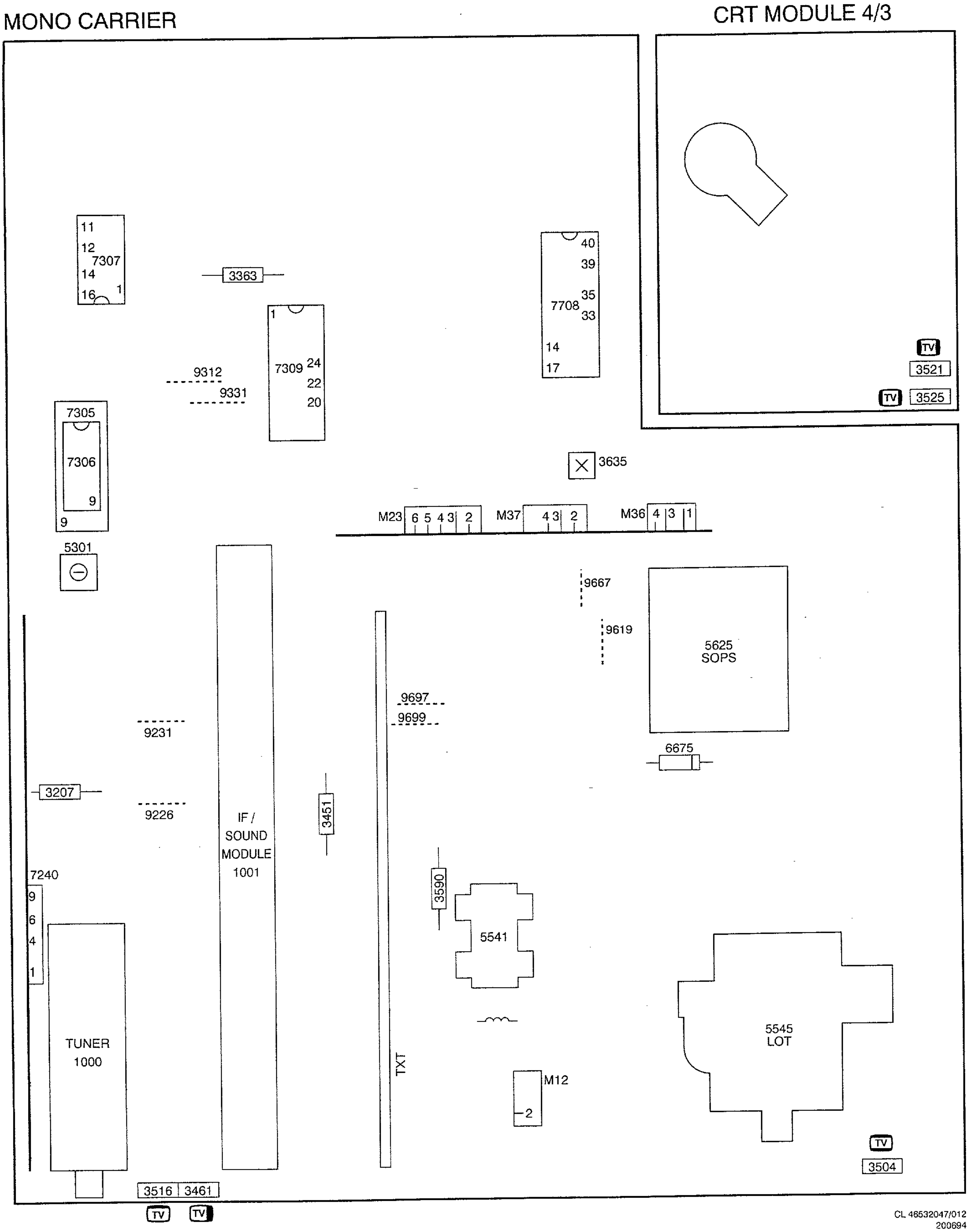
Message on screen	Description	Possible fault
PIP	I^2C error PIP module	+5 on PIP module, IC7406
NICA	I^2C error IC7305 (NICAM sets)	IC7305, +5 on IF module
9860	I^2C error IC7204	+5/+8 on IF module, IC7305
9840	I^2C error IC7205	+5/+8 on IF module, IC7205
TXT	I^2C error teletext module	IC7910/IC7920 , +5 on TEXT module
EPROM	I^2C error IC7710	IC7708/IC7710, +5 on IC's
TUNE	I^2C error tuner	+5/+14 on tuner, TS7003
CHR1	I^2C error IC7308	+14 on IC7308
CHR2	I^2C error IC7309	+14 on IC7309
6415	I^2C error IC7820	
BUS + blinking LED	I^2C bus blocked	I^2C bus check on all IC's

Error messages

Internal microcomputer errors and external errors will be signalled by displaying the error number (by OSD) and by continuous blinking the LED (video related errors only).

The last five errors will be remembered in the non volatile memory (if possible), this is called the error buffer. After a startup of the system (on by main switch or on from standby) only one error will be added to the buffer (first in, first out procedure), only errors different from the last error in the buffer, will be added to this buffer.
The error will be cleared when the "standby" command is given while the system is in service menu mode.
An active error is displayed continuously in service default mode. The buffer is shown in the service menu mode (Service main menu).

Electrical adjustments


MONO CARRIER
CRT MODULE 4/3
7307
11
12
14
16
1
3363
1
7309
24
22
20
9312
9331
7708
40
39
35
33
14
17
TV
3521
TV
3525
7305
7306
9
9
3635
M23
6 5 4 3
2
M37
4 3
2
M36
4
3
1
5301
9667
9619
5625
SOPS
9697
9699
9231
6675
3207
9226
IF / SOUND MODULE 1001
3451
3590
7240
9
6
4
1
5541
5545
LOT
TUNER 1000
TXT
M12
2
TV
3504
3516
3461
TV
TV

9. Directions for use

1. Service-Default-Mode

The GR2.4 is equipped with a service default mode. The service default mode is a fixed defined condition in which the television can be set.

1.1 Mode definition

The definition of the fixed mode in the service default mode is as follows:

- all sound and picture adjustments are set in the middle position (except volume, which is set at low and zoom set at zero) in 4/3 mode.
- The set is tuned to 475.25 MHz
- system:

* PAL BG or PAL I for single system sets (MULTI-SYSTEM "OFF")
* SECAM L/DK for multi-system sets (MULTI-SYSTEM "ON")
* SECAM DK for sets for Eastern Europe (MULTI-SYSTEM "ON").
* PAL BG for sets for Eastern Europe (MULTI-SYSTEM "OFF").

1.2 Service-default-mode

The service default mode is switched on by briefly short-circuiting the pins M33 and M34 (SERVICE) behind the INSTALL key on the carrier panel when switching the unit on with the mains switch. In order to indicate that the unit is in the service default mode, an "SER" appears on the screen.
The service default mode can only be switched off by switching the unit to standby (⏻). The set is switched off and then on again using the mains switch or mains plug, the service default mode remains switched on.
Searching for transmitter frequencies begins following the simultaneous pressing of both "install" keys on the remote control. When the service default mode is operational the following functions are switched off:
- automatic cut-off circuit.

The set can be controlled normally.

1.3 Service menu

- Service menu

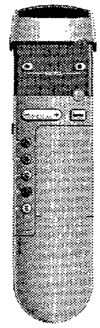
  The service menu is activated by simultaneously pressing the "menu" and "-" keys on the local operating panel. The service menu now appears on the screen. The service menu offers the facility to set various options and make a number of picture tube settings. The various components in the service menu are selected using the coloured keys on the remote control.The adjustment of the various components is performed with the aid of the "menu +/-" keys on the remote control. The adjusted values and options are immediately stored in the EEPROM when the service menu is exited via "menu on" or "mainsknob" button. With the "menu" key you return to the "default service mode".

Remarks 1:
If a multi-system set is nevertheless to be used with the PAL BG system in the service default mode, the option "MULTI" can be temporarily switched off ("OFF").

Remarks 2:
If a multi-system set for Eastern Europe is nevertheless to be used with the PAL BG system in the service default mode, the option "MULTI" can be temporarily switched off ("OFF").

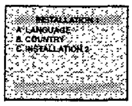
9. Directions for use

Calling up the installation menu



This menu enables you to tune in the channels on the TV set.

- ○ Open the flap on the remote control.
- ○ Press both the ⊕ and ⊙ keys at the same time.
- ▷ The **INSTALLATION 1** menu appears on the screen.

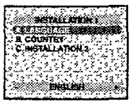

INSTALLATION 1
A LANGUAGE
B COUNTRY
C INSTALLATION 2

Selecting the menu language

You may choose between several languages for the menus which appear on the screen.
You can select **ENGLISH** or one of the other languages offered.

After calling up the **INSTALLATION 1** menu:

- ○ Press the red key Ⓐ.
- ▷ A display area appears at the bottom of the screen.
- ○ Press the ⊖⊕ key to select your chosen language.
- ▷ The text for all menus will appear in the language which you have chosen. Go on to the next adjustment.

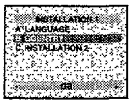

INSTALLATION 1
B COUNTRY
C INSTALLATION 2
ENGLISH

Selecting the country

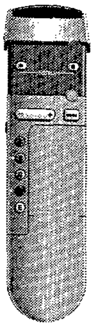
You should now select the country in which you are situated.

After calling up the **INSTALLATION 1** menu:

- ○ Press the green key Ⓑ.
- ▷ A display area appears at the bottom of the screen.
- ○ Press the ⊖⊕ key to select the letters corresponding to your country (GB for Great Britain).
- ▷ Your choice is displayed at the bottom of the screen. You can now go on to **chapter 7** on page 4.

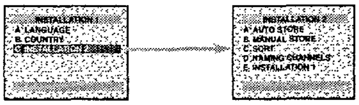

INSTALLATION 1
A LANGUAGE
C INSTALLATION 2
GB

Tuning-in TV channels



Starting from the **INSTALLATION 1** menu:

- ○ Press the yellow key Ⓒ.
- ▷ The **INSTALLATION 2** menu appears on the screen.


INSTALLATION 1
A LANGUAGE
B COUNTRY
INSTALLATION 2
A AUTO STORE
B MANUAL STORE
C SORT
D NAMING CHANNELS
E INSTALLATION 1

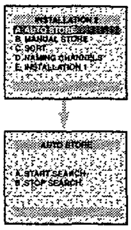
You have the choice between two methods:

- **automatic store:** the TV set stores all the available channels in your area. You just have to renumber the channels according to your preference.
- **manual store:** you can manually tune-in each channel, one by one.

Automatic store

After calling up the **INSTALLATION 2** menu (see above):

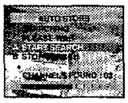
- ○ Press the red key Ⓐ.
- ▷ The **AUTO STORE** menu appears.
- ○ Press the red key Ⓐ to start the search.
- ▷ The indication **SEARCHING PLEASE WAIT** appears on the screen. The TV set searches through the complete frequency range and stores all the TV channels which it finds. **The search takes several minutes.** A horizontal scale shows the progress of the search. **You must wait until the horizontal bar has reached the end of the line.**


INSTALLATION 2
A AUTO STORE
B MANUAL STORE
C SORT
D NAMING CHANNELS
E INSTALLATION 1
AUTO STORE
A START SEARCH
B STOP SEARCH

When the search has finished:

The indication **CHANNELS FOUND** flashes. The total number of TV channels found is displayed. The TV channels have been numbered in the order in which they were found. You must therefore sort them to give them the desired channel numbers.

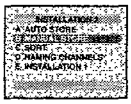
- ○ Press the ▤ key.
- ▷ The **INSTALLATION 2** menu reappears. You now have to sort the channels: turn to **chapter 8** on page 7.


AUTO STORE
PLEASE WAIT
A START SEARCH
B STOP SEARCH
CHANNELS FOUND : 03

Manual store

After calling up the **INSTALLATION 2** menu (see previous page):

- ○ Press the green key Ⓑ.
- ▷ The **MANUAL STORE** menu appears.

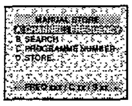

INSTALLATION 2
A AUTO STORE
C SORT
D NAMING CHANNELS
E INSTALLATION 1

step a

Selecting the tuning mode

This TV set allows you to choose the tuning mode: **tuning by channel number** (if you know the channel numbers on which the TV channels are broadcast) or **tuning by frequency.**

- ○ Press the red key Ⓐ.
- ▷ The lower bar of the menu is displayed in red.
- ○ Press the ⊖⊕ key to select the tuning mode.
- ▷ The indication **FREQ xxx MHZ** means tuning by frequency. The indication **C xx** or **S xx** means tuning by channel number. **Go on to step b.**


MANUAL STORE
B SEARCH
C PROGRAMME NUMBER
D STORE
FREQ xxx / C xx / S xx

Direct selection of a transmitter

If you know the frequency or the channel number of the TV programme which you wish to receive, you can directly enter the number using the keys numbered ⓪ to ⑨ or the ⊖ P ⊕ key.
For example: in tuning by frequency mode, enter 064 for 64 MHz; in tuning by channel number mode, enter 21 for C21 (for 64,25 MHz, enter 064: the exact adjustment is carried out automatically).
Go directly to **step C.**

step b

Search

- ○ Press the green key Ⓑ.
- ▷ The lower bar of the menu is displayed in green, the search starts. The frequency or channel number counts upwards. As soon as a TV channel is found, the counting stops and the rectangle is displayed in blue.

If you want to store this channel, **go on to step C.**

If you do not want to store the channel:

- ○ Press the green key Ⓑ again.
- ▷ The search continues.

MANUAL STORE
A CHANNEL / FREQUENCY
CHANNEL / FREQUENCY

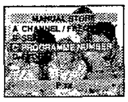
Fine tuning

If the reception of a TV channel is not satisfactory, you can adjust its frequency or channel number by using the ⊖⊕ key.

step c

Numbering the programme

- ○ Press the yellow key Ⓒ.
- ▷ A display area appears at the bottom of the screen.
- ○ Press the ⊖ P ⊕ key or the keys numbered ⓪ to ⑨ to enter the programme number. Go on to **step d.**


MANUAL STORE
A CHANNEL / FREQUENCY
C PROGRAMME NUMBER

step d

Storing

- ○ Press the blue key Ⓓ.
- ▷ The indication **PROGRAMME STORED** appears at the bottom of the screen, the TV channel is stored.

MANUAL STORE
A CHANNEL / FREQUENCY
PROGRAMME STORED

repeat

steps **b, c, d**
or **a, b, c, d** if you want to change the tuning mode.

When tuning-in of TV channels is completed

- ○ Press the ▤ key.
- ▷ The **INSTALLATION 2** menu reappears.

You can now give names to the TV channels: turn to **chapter 9** on page 8.

To exit from the INSTALLATION 2 menu:

- ○ Press the ▤ key again.

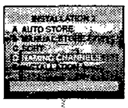
You can now proceed with operating the TV set (page 9).

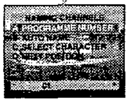
Naming channels

You can give a name of up to 5 characters to each of the first 40 channels on your TV set (examples: BBC1, CNN...). This function allows you to recognise and display the name and number of the programme being watched.

Starting from the **INSTALLATION 2** menu:

- ○ Press the blue key Ⓓ.
- ▹ The **NAMING CHANNELS** menu appears.


INSTALLATION 2
A AUTO STORE
C SORT
D NAMING CHANNELS


NAMING CHANNELS
A PROGRAMME NUMBER
C SELECT CHARACTER
D NEXT POSITION
01

step a Programme number

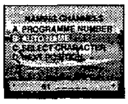
- ○ Press the red key Ⓐ.
- ▹ The programme number is displayed at the bottom of the screen.
- ○ Use the ⊖⊕ key or the keys numbered ⓪ to ⑨ to select the channel to which you want to give a name.

step b Auto name

The **AUTO NAME** function enables you to automatically assign the first 5 characters of a name to a TV channel when teletext is available.

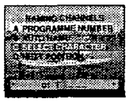
When the TV channel is on the screen:

- ○ Press the green key Ⓑ.
- ▹ The lower bar of the menu is displayed in green.
- ○ Press the ⊖⊕ key to carry out the **AUTO NAME**.
- ▹ The first 5 characters of the programme name are displayed. If nothing is displayed, this means that the programme name is not broadcast, go on to **step C**.


NAMING CHANNELS
A PROGRAMME NUMBER
C SELECT CHARACTER
D NEXT POSITION
01

step c Select character

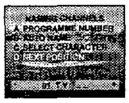
- ○ Press the yellow key Ⓒ.
- ▹ The character display area appears. A cursor is positioned at the first character.
- ○ Use the ⊖⊕ key to select the first character.


NAMING CHANNELS
A PROGRAMME NUMBER
D NEXT POSITION

step d Next position

When the desired character has been chosen:

- ○ Press the blue key Ⓓ to enable the cursor to be moved.
- ▹ Use the ⊖⊕ key to move the cursor to the left or to the right.
- ○ Press the yellow key Ⓒ again.
- ▹ Use the ⊖⊕ key to choose the second character. Repeat the operation as many times as needed to select all characters.


NAMING CHANNELS
A PROGRAMME NUMBER
C SELECT CHARACTER
D NEXT POSITION
01 TV

repeat steps **a**, **b**, **c** and **d** for all the TV channels you wish to name

To exit from the NAMING CHANELS menu:

- ○ Press the ▤ key.
- ▹ The **INSTALLATION** 2 menu reappears.

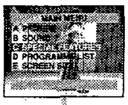
To exit from the INSTALLATION 2 menu:

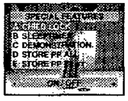
- ○ Press the ▤ key again.

Special features

Starting from the **MAIN MENU:**

- ○ Press the yellow key Ⓒ.
- ▹ The **SPECIAL FEATURES** menu appears on the screen.


MAIN MENU
B SOUND
C SPECIAL FEATURES
D PROGRAMME LIST
E SCREEN SIZE


SPECIAL FEATURES
A CHILD LOCK
B SLEEPTIMER
C DEMONSTRATION
D STORE PP ALL
E STORE PP
ON / OFF

Child lock

The child lock function is an electronic lock which disables the keys on the TV set. This function enables you to prevent operation of the TV set (by your children for example). You then simply have to activate the child lock and hide the remote control so that the TV set is unusable.

Starting from the **SPECIAL FEATURES** menu:

- ○ Press the red key Ⓐ.
- ▹ The indication **OFF** is displayed at the bottom of the screen.
- ○ Press the ⊖⊕ key.
- ▹ The indication **ON** appears. The keys on the TV set are no longer active.

To check that the child lock is functioning:

- ○ Press the ⏻ key on the front of the TV set to switch off the set.
- ○ Press the ⏻ key again to switch on.
- ▹ The TV set remains in standby (the red indicator lights up).
- ○ Press one of the keys on the TV set.
- ▹ The indication **CHILD LOCK** appears for a few moments and the screen remains black. The only way of switching on the TV set is to use the remote control.

To cancel the child lock:

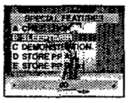
- ○ Select the function again and reposition the menu display to **OFF**.

Sleeptimer

This function allows you to program the TV set to automatically switch off after a certain period of time.

Starting from the **SPECIAL FEATURES** menu:

- ○ Press the green key Ⓑ.
- ▹ The indication **00** is displayed at the bottom of the screen.
- ○ Press the ⊖⊕ key to program the duration.
- ▹ Each time you press the key, the duration increases by 15 minutes (up to 90 minutes).
- ○ Press the ▤ key twice to exit from the menu.
- ▹ The TV set automatically switches to standby after the programmed time period has elapsed.


SPECIAL FEATURES
A CHILD LOCK
B SLEEPTIMER
C DEMONSTRATION
D STORE PP ALL
E STORE PP
00

To display the remaining time:

- ○ Press the ⊙ key.
- ▹ The remaining time is displayed for a few moments on the screen.

To cancel the programmed switching off:

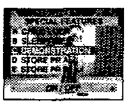
- ○ Select the function again and reset the menu display to 00.

Demonstration

The demonstration mode triggers off an automatic display of all the TV set's menus:

Starting from the **SPECIAL FEATURES** menu:

- ○ Press the yellow key Ⓒ.
- ▹ The indication **OFF** appears at the bottom of the screen.
- ○ Press the ⊖⊕ key to switch on the demonstration mode.
- ▹ The indication **DEMONSTRATION** is displayed, the OPERATION and INSTALLATION menus are displayed automatically one after the other.


SPECIAL FEATURES
A CHILD LOCK
B SLEEPTIMER
C DEMONSTRATION
D STORE PP ALL
E STORE PP
ON / OFF

To switch off the demonstration mode:

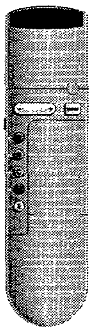
- ○ Press the ▤ key.

Calling up the main menu

The main menu gives you access to the adjustments and special features of your TV set.

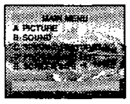
The ▤ key enables you to call up or to exit from the menu.

The coloured keys Ⓐ, Ⓑ, Ⓒ, Ⓓ and Ⓔ allow access to the various choices within the menus. The ⊖⊕ key enables you to make the adjustments.



To call up the MAIN MENU:

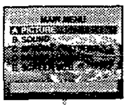
- ○ Press the ▤ key on the remote control.
- ▹ The **MAIN MENU** appears on the screen.

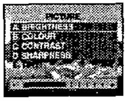

MAIN MENU
A PICTURE
B SOUND

Adjusting the picture

After calling up the **MAIN MENU** (see above):

- ○ Press the red key Ⓐ.
- ▹ The **PICTURE** menu appears on the screen.


MAIN MENU
A PICTURE
B SOUND


PICTURE
A BRIGHTNESS
B COLOUR
C CONTRAST
D SHARPNESS

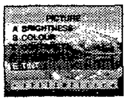
Brightness, colour, contrast, sharpness

- ○ Press the coloured key Ⓐ, Ⓑ, Ⓒ or Ⓓ corresponding to the adjustment which you want to modify.
- ▹ A horizontal scale appears at the bottom of the screen.
- ○ Press the ⊖⊕ key to make the adjustment.
- ▹ The cursor moves according to your adjustment.
- ○ Press the corresponding coloured key to select another adjustment.

Tint

The tint adjustment allows you to influence the colour reproduction by modifying the white reference.

- ○ Press the white key Ⓔ.
- ▹ A horizontal scale appears at the bottom of the screen.
- ○ Press the ⊖⊕ key to make the adjustment.
- ▹ For a 'warm' picture (redder whites): move the cursor to the maximum (+) position.
- ▹ For a balanced colour reproduction: move the cursor to the middle position.
- ▹ For a 'cool' picture (bluer whites): move the cursor to the minimum (-) position.


PICTURE
A BRIGHTNESS
B COLOUR
E TINT

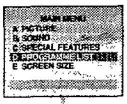
To exit from the PICTURE menu

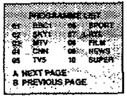
- ○ Press the ▤ key.
- ▹ The **MAIN MENU** reappears, move on to "Adjusting the sound".
- ○ To exit from the **MAIN MENU** press the ▤ key a second time.

Programme list

This function allows you to consult the list of programme names and numbers of the first 40 channels which you have stored in the **INSTALLATION** menu.

- ○ Press the ▤ key.
- ▹ The **MAIN MENU** appears on the screen.
- ○ Press the blue key Ⓓ.
- ▹ The **PROGRAMME LIST** menu appears on the screen with the list of the first 10 channels.


MAIN MENU
A PICTURE
B SOUND
C SPECIAL FEATURES
D PROGRAMME LIST
E SCREEN SIZE


PROGRAMME LIST
01 BBC1
02 SKY1
03 MTV
04 CNN
05 TV5
06 SPORT
07
08 FILM
09 NEWS
10 SUPER
A NEXT PAGE
B PREVIOUS PAGE

To display the next page:

- ○ Press the red key Ⓐ.

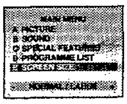
To display the previous page:

- ○ Press the green key Ⓑ.

Screen size

This function enables you to adapt 16/9 format pictures to the proportions of your screen (4/3).

- ○ Press the ▤ key.
- ▹ The **MAIN MENU** appears on the screen.
- ○ Press the white key Ⓔ.
- ▹ The indication **NORMAL** is displayed at the bottom of the screen.
- ○ Press the ⊖⊕ key.
- ▹ The indication **LARGE** is displayed and a black band appears at the top and bottom of the screen. The picture is reproduced in 16/9 format.


MAIN MENU
A PICTURE
B SOUND
C SPECIAL FEATURES
D PROGRAMME LIST
E SCREEN SIZE
NORMAL / LARGE

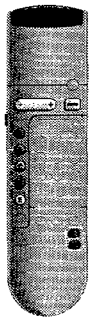
Programmable keys

The remote control has two blue programmable keys ⊖ and ⊕. If you regularly use certain adjustments within the menus (for example the spatial effect, headphone volume, brightness...) it is possible to program direct access to one of these adjustments.

- ○ Press the ▤ key.
- ▹ The **MAIN MENU** appears on the screen.

Select the adjustment which you wish to program.
For example, to program the spatial effect:

- ○ Press the green key Ⓑ to call up the **SOUND** menu.
- ○ Press the blue key Ⓓ to select **SPATIAL** effect.
- ▹ The indication **OFF** or **ON** appears at the bottom of the screen.
- ○ Use the blue keys ⊖ and ⊕ instead of the ⊖⊕ key to make the adjustment.
- ▹ The sound is modified. The keys ⊖ and ⊕are automatically programmed.
- ○ Press the ▤ key twice to exit from the menu.



To check the function:

- ○ Press the blue keys ⊖ and ⊕.
- ▹ Each time the keys are pressed, the spatial effect is switched on or off. From now onwards, these two keys allow you to adjust the spatial effect directly, without using the menus. Carry out the operation on the adjustment of your choice.

10. Spare parts list / Stükliste / Liste des pièces

Main carrier [A/B/C/D]

Various

▲	4822 265 30389	2P male vert yellow
	4822 264 40207	3P male vert WTB
	4822 267 40666	3P male vert blue
	4822 264 40239	3P male vert green
▲	4822 265 30877	3P male vert
	4822 267 40696	3P male vert white
	4822 267 41113	3P female hor white
	4822 267 31694	3P female hor blue
	4822 267 40794	3P female vert grey WTB
	4822 267 40699	4P male vert red
	4822 265 30378	4P male vert WTB
	4822 290 40283	5P male vert green
	4822 265 40421	6P male vert WTB
	4822 267 30546	6P female vert grey
	4822 267 50621	7P male vert white
▲	4822 267 60243	Euroconnector (scart) blue
▲	4822 256 92053	Fuse holder
	4822 256 91879	Holder
▲	4822 502 13712	Screw 12x3
	4822 492 70871	Spring
	4822 492 70143	Spring 10x33
	4822 466 30395	Shield microprocessor

1000	4822 210 10436	U944C/IEC
1000	4822 210 10611	UV916M
1240▲	4822 252 51174	Fuse 1.6A 65V
1242▲	4822 252 51174	Fuse 1.6A 65V
1300	4822 242 81807	8.867570 MHz
1301	4822 242 70304	8.867238 MHz
1534▲	4822 252 51172	Fuse 3.15A 65V
1559▲	4822 252 51173	Fuse 1A 65V
1563	4822 526 10405	Bead
1564	4822 526 10405	Bead
1580▲	4822 252 51174	Fuse 1.6A 65V
1600▲	4822 070 32502	Fuse 2.5A 65V
1601▲	4822 252 51175	Fuse 2.5A 65V
1640	4822 526 10405	Bead
1641	4822 526 10405	Bead
1642	4822 526 10405	Bead
1643	4822 526 10405	Bead
1702	4822 242 81841	8MHz

⊣⊢

2001	4822 124 40214	1000µF 20% 25V
2002	4822 122 31797	22nF 10% 63V
2003	4822 122 33496	100nF 10% 63V
2005▲	4822 124 40196	220µF 20% 16V
2010	4822 124 40248	10µF 20% 63V
2012	4822 122 31768	180pF 2% 63V
2231▲	4822 124 41525	100µF 20% 25V
2232	4822 122 31797	22nF 10% 63V
2236	4822 122 31644	2.2nF 10% 63V
2236	4822 122 31784	4.7nF 10% 50V
2237	4822 122 31947	100nF 20% 63V
2238	4822 122 32153	1.8nF 10% 63V
2238	4822 122 33498	2.7nF 10% 63V
2239	4822 122 31947	100nF 20% 63V
2240	4822 124 40214	1000µF 20% 25V
2241	5322 121 42386	100nF 5% 63V
2242	4822 124 40214	1000µF 20% 25V
2243	4822 121 41856	22nF 5% 250V
2245	4822 121 41856	22nF 5% 250V
2246	4822 124 41596	22µF 20% 50V
2248	4822 124 40849	330µF 20% 16V
2249	4822 122 31797	22nF 10% 63V
2252	4822 121 41857	10nF 5% 250V
2253	4822 121 41857	10nF 5% 250V
2254	4822 121 51252	470nF 5% 63V
2255	4822 121 51252	470nF 5% 63V
2256	4822 122 32142	270pF 2% 63V
2257	4822 122 32142	270pF 2% 63V
2258	4822 121 51252	470nF 5% 63V
2259	4822 121 51252	470nF 5% 63V
2260	4822 122 31116	2.2nF 10% 500V
2261	4822 122 31116	2.2nF 10% 500V
2300	4822 122 32482	22pF 2% 63V
2301	4822 122 32999	2.2nF 5%
2303	4822 122 31768	180pF 2% 63V
2304	4822 122 31773	560pF 2% 63V
2304	4822 122 32999	2.2nF 5%
2305	4822 126 10324	33pF 2% 63V
2306	4822 122 31965	220pF 2% 63V
2307	4822 122 33496	100nF 10% 63V
2308	4822 122 31797	22nF 10% 63V
2310	4822 121 41857	10nF 5% 250V
2310	4822 121 42408	220nF 5% 63V
2311	4822 122 33496	100nF 10% 63V
2312	4822 121 41857	10nF 5% 250V
2312	4822 121 42408	220nF 5% 63V
2313	4822 125 50045	1p8-22p 250V
2314	5322 121 42661	330nF 5% 63V
2314	5322 122 32818	2.2nF 10% 100V
2315	4822 122 31825	27pF 2% 63V
2316	4822 122 33496	100nF 10% 63V
2319▲	4822 122 32442	10nF 50V
2321	4822 122 31797	22nF 10% 63V
2322	4822 122 31797	22nF 10% 63V
2323	4822 122 32542	47nF 10% 63V
2325	4822 122 31965	220pF 2% 63V
2325	4822 122 32542	47nF 10% 63V
2326	4822 122 31839	82pF 2% 63V
2328▲	4822 122 32442	10nF 50V
2329▲	4822 122 32442	10nF 50V
2330	4822 122 33496	100nF 10% 63V
2331	4822 122 33496	100nF 10% 63V
2332	4822 122 33496	100nF 10% 63V
2333	4822 122 33496	100nF 10% 63V
2334	4822 122 33496	100nF 10% 63V
2336	4822 122 31797	22nF 10% 63V
2337	4822 122 31797	22nF 10% 63V
2338	4822 122 31797	22nF 10% 63V
2339	4822 122 33496	100nF 10% 63V
2340	4822 122 31797	22nF 10% 63V
2341	4822 122 31797	22nF 10% 63V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 122 33496	100nF 10% 63V
2345	4822 122 31797	22nF 10% 63V
2348▲	4822 124 40196	220µF 20% 16V
2349	5322 122 31647	1nF 10% 63V
2350▲	4822 124 40433	47µF 20% 25V
2351	4822 122 31797	22nF 10% 63V
2352	5322 122 31647	1nF 10% 63V
2353	4822 122 33496	100nF 10% 63V
2354	4822 124 40242	1µF 20% 63V
2355	4822 124 40849	330µF 20% 16V
2356	4822 122 31797	22nF 10% 63V
2357	4822 122 31797	22nF 10% 63V
2358	4822 122 31797	22nF 10% 63V
2359	4822 122 31765	100pF 2% 63V
2360	4822 122 33496	100nF 10% 63V
2361	4822 122 33496	100nF 10% 63V
2362	4822 122 33496	100nF 10% 63V
2363	4822 122 31765	100pF 2% 63V
2365	5322 121 42661	330nF 5% 63V
2366	4822 124 40248	10µF 20% 63V
2367	4822 124 40753	6.8µF 20% 63V
2368	4822 126 13094	11pF 2% 63V
2369	4822 121 51252	470nF 5% 63V
2370	4822 121 42408	220nF 5% 63V
2374	4822 122 31772	47pF 2% 63V
2378	4822 122 33496	100nF 10% 63V
2385	4822 122 31772	47pF 2% 63V
2386	4822 122 33481	1800pF 2% 63V
2451	4822 122 33496	100nF 10% 63V
2453	5322 124 41431	22µF 20% 35V
2455	5322 122 31647	1nF 10% 63V
2456	4822 124 40242	1µF 20% 63V
2457	4822 122 33496	100nF 10% 63V
2458	4822 121 42937	2.7nF 1% 250V
2459	4822 122 33496	100nF 10% 63V
2460	4822 122 32566	3.9nF 10% 63V
2460	4822 122 33498	2.7nF 10% 63V
2461	5322 122 31647	1nF 10% 63V
2462	4822 122 31797	22nF 10% 63V
2464	4822 122 33496	100nF 10% 63V
2465	4822 124 40198	470µF 20% 16V
2466	4822 124 40248	10µF 20% 63V
2467	4822 122 33496	100nF 10% 63V
2468	4822 124 22652	2.2µF 20% 50V
2469	4822 124 41596	22µF 20% 50V
2470	4822 122 31772	47pF 2% 63V
2471	5322 121 42661	330nF 5% 63V
2473	5322 121 42661	330nF 5% 63V
2475	5322 122 31647	1nF 10% 63V
2476▲	4822 122 32442	10nF 50V
2500	4822 122 31773	560pF 2% 63V
2501	4822 122 33481	1800pF 2% 63V
2502	5322 124 41381	22µF 20% 50V
2503▲	4822 122 32442	10nF 50V
2505	4822 122 32542	47nF 10% 63V
2506	4822 124 80065	1000µF 20% 50V
2507	4822 122 31797	22nF 10% 63V
2509	4822 121 51319	1µF 10% 63V
2524	4822 124 42167	4.7µF 20% 50V
2539	4822 124 40198	470µF 20% 16V
2543	4822 122 31784	4.7nF 10% 50V
2544	4822 122 32183	56nF 10% 50V
2545▲	4822 126 12273	1200pF 10%R(HR) 2KV
2545▲	4822 126 12274	1500pF 10%R(HR) 2KV
2546▲	4822 121 70434	11nF 5% 1.6KV
2546▲	4822 121 70538	13nF 5% 1.6KV
2547▲	4822 121 42934	27nF 10% 400V
2547▲	5322 121 44219	47nF 10% 400V
2548	4822 121 41856	22nF 5% 250V
2549▲	4822 121 42074	470 nF 10% 400V
2550▲	4822 121 51528	470nF 5% 250V
2550▲	5322 121 44128	680nF 10% 250V
2551	4822 124 80069	1µF 20% 160V
2552	4822 122 33496	100nF 10% 63V
2559	4822 124 80059	100µF 20% 25V
2560▲	4822 121 51408	33nF 10% 250V
2561	4822 122 31766	120pF 2% 63V
2570	4822 124 80071	22µF 20% 160V
2574	4822 122 30057	2.7nF 10% 100V
2580	4822 124 80061	1000µF 20% 25V
2588	4822 051 10008	0R00 5% 0.25W
2590	5322 121 42498	680nF 5% 63V
2600▲	4822 121 70285	470nF 10% 250V
2605	4822 124 23492	220µF 50% 385V
2605▲	4822 124 80728	150µF 20% 385V
2607▲	4822 121 51469	1nF 400V
2608	4822 122 31965	220pF 2% 63V
2612	5322 122 31647	1nF 10% 63V
2617	4822 121 51252	470nF 5% 63V
2617	4822 121 51319	1µF 10% 63V
2620	5322 121 42465	68nF 5% 63V
2625▲	4822 126 12272	1nF 10%R(HR) 2KV
2626▲	4822 126 12267	470pF 10%R(HR) 2KV
2630	4822 124 23418	47µF 200V
2630	4822 124 42448	100µF 20% 200V
2631	4822 124 23418	47µF 200V
2631	4822 124 42448	100µF 20% 200V
2632▲	4822 126 11382	1nF 10% 1KV
2640	4822 124 80061	1000µF 20% 25V
2641	4822 124 80061	1000µF 20% 25V
2652	5322 122 32331	1nF 10% 100V
2653	5322 122 32331	1nF 10% 100V
2658	5322 122 32838	82nF 10% 63V
2660	4822 124 80061	1000µF 20% 25V
2672	5322 124 41379	2.2µF 20% 50V
2675	4822 124 80064	680µF 20% 50V
2675	4822 124 80065	1000µF 20% 50V
2676	5322 122 32331	1nF 10% 100V
2700	4822 124 40248	10µF 20% 63V
2704	4822 122 32542	47nF 10% 63V
2705	4822 122 31766	120pF 2% 63V
2706	4822 124 41643	100µF 20% 16V
2707▲	4822 122 32442	10nF 50V
2708	4822 122 31766	120pF 2% 63V
2709	4822 122 32139	12pF 2% 63V
2710	4822 122 32139	12pF 2% 63V
2711	4822 122 31825	27pF 2% 63V
2712	4822 122 31825	27pF 2% 63V
2713▲	4822 124 41525	100µF 20% 25V
2716	4822 122 33496	100nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	5322 121 42386	100nF 5% 63V
2721	4822 122 31784	4.7nF 10% 50V
2722	4822 122 33496	100nF 10% 63V
2853	4822 121 43856	4.7nF 5% 250V
2854	4822 122 33496	100nF 10% 63V
2860	4822 124 40248	10µF 20% 63V

⊣▭⊢

3001▲	4822 052 10399	39Ω 5% 0.33W
3002	4822 116 52257	22k 5% 0.5W
3003	4822 116 52296	6k8 5% 0.5W
3009	4822 116 52175	100Ω 5% 0.5W
3010	4822 116 52175	100Ω 5% 0.5W
3200	4822 051 10223	22k 2% 0.25W
3201	4822 051 10562	5k6 2% 0.25W
3202	4822 051 10122	1k2 2% 0.25W
3203▲	4822 116 52233	10k 5% 0.5W
3204	4822 051 10101	100Ω 2% 0.25W
3205	4822 051 10223	22k 2% 0.25W
3206	4822 051 10562	5k6 2% 0.25W
3207	4822 116 52207	1k2 5% 0.5W
3208	4822 116 52228	680Ω 5% 0.5W
3208▲	4822 116 52263	2k7 5% 0.5W
3209	4822 116 52228	680Ω 5% 0.5W
3209▲	4822 116 52263	2k7 5% 0.5W
3220	4822 051 10392	3k9 2% 0.25W
3222	4822 116 52234	100Ω 5% 0.5W
3223	4822 051 10109	10Ω 2% 0.25W
3224	4822 051 20222	2k2 5% 0.1W
3225	4822 051 10272	2k7 2% 0.25W
3226	4822 051 10333	33k 2% 0.25W
3227	4822 051 10333	33k 2% 0.25W.
3228	4822 116 52211	150Ω 5% 0.5W
3229	4822 051 10562	5k6 2% 0.25W
3230	4822 051 10223	22k 2% 0.25W
3231▲	4822 051 10472	4k7 2% 0.25W
3240▲	4822 052 10828	8Ω2 5% 0.33W
3241▲	4822 052 10828	8Ω2 5% 0.33W
3242	4822 051 10563	56k 2% 0.25W
3243	4822 051 10563	56k 2% 0.25W
3244▲	4822 051 10103	10k 2% 0.25W
3245▲	4822 051 10103	10k 2% 0.25W
3250	4822 116 80175	4k7 5% 0.5W
3251	4822 116 80175	4k7 5% 0.5W
3253	4822 116 52211	150Ω 5% 0.5W
3254	4822 116 52211	150Ω 5% 0.5W
3300	4822 051 10822	8k2 2% 0.25W
3301	4822 051 10272	2k7 2% 0.25W
3302	4822 051 20222	2k2 5% 0.1W
3303	4822 051 10122	1k2 2% 0.25W
3303	4822 051 10392	3k9 2% 0.25W
3304	4822 051 10182	1k8 2% 0.25W
3305	4822 051 10431	430Ω 2% 0.25W
3306▲	4822 116 52233	10k 5% 0.5W
3307	4822 051 10561	560Ω 2% 0.25W
3307	4822 051 10681	680Ω 2% 0.25W
3308	4822 051 20183	18k 5% 0.1W
3309	4822 051 10562	5k6 2% 0.25W
3310▲	4822 051 10472	4k7 2% 0.25W
3311▲	4822 051 10103	10k 2% 0.25W
3312	4822 051 10331	330Ω 2% 0.25W
3313	4822 051 10274	270k 2% 0.25W
3314▲	4822 116 52233	10k 5% 0.5W
3318	4822 116 52224	470Ω 5% 0.5W
3319▲	4822 051 10103	10k 2% 0.25W
3321	4822 051 10473	47k 2% 0.25W
3323	4822 116 52305	820k 5% 0.5W
3324	4822 051 10331	330Ω 2% 0.25W
3325	4822 116 52175	100Ω 5% 0.5W
3326	4822 051 10101	100Ω 2% 0.25W
3327	4822 051 10331	330Ω 2% 0.25W
3328	4822 051 10102	1k 2% 0.25W
3329▲	4822 116 52256	2k2 5% 0.5W
3330	4822 051 10109	10Ω 2% 0.25W
3331	4822 051 10109	10Ω 2% 0.25W
3332	4822 050 15609	56Ω 1% 0.4W
3333	4822 051 20222	2k2 5% 0.1W
3334▲	4822 053 11279	27Ω 5% 2W
3334	4822 053 11399	39Ω 5% 2W
3335	4822 116 52226	560Ω 5% 0.5W
3336▲	4822 052 10479	47Ω 5% 0.33W
3342▲	4822 051 10103	10k 2% 0.25W
3343	4822 051 10473	47k 2% 0.25W
3346	4822 051 10332	3k3 2% 0.25W
3347▲	4822 116 52219	330Ω 5% 0.5W
3348▲	4822 116 52219	330Ω 5% 0.5W
3349▲	4822 116 52219	330Ω 5% 0.5W
3350	4822 050 11002	1k 1% 0.4W
3356▲	4822 050 21008	1Ω 1% 0.6W
3358	4822 051 10331	330Ω 2% 0.25W
3359▲	4822 116 52219	330Ω 5% 0.5W
3361	4822 051 10101	100Ω 2% 0.25W
3362	4822 051 10102	1k 2% 0.25W
3363	4822 116 52175	100Ω 5% 0.5W
3364	4822 050 21502	1k5 1% 0.6W
3366	4822 116 52297	68k 5% 0.5W
3367	4822 116 52175	100Ω 5% 0.5W
3368	4822 116 52175	100Ω 5% 0.5W
3369	4822 116 52175	100Ω 5% 0.5W
3370▲	4822 051 10472	4k7 2% 0.25W
3371	4822 051 10332	3k3 2% 0.25W
3375	4822 051 10109	10Ω 2% 0.25W
3376	4822 051 10109	10Ω 2% 0.25W
3380	4822 051 10101	100Ω 2% 0.25W
3381	4822 051 10101	100Ω 2% 0.25W
3385	4822 051 10102	1k 2% 0.25W
3450	4822 116 52238	12k 5% 0.5W
3451	4822 116 52175	100Ω 5% 0.5W
3453	4822 116 52251	18k 5% 0.5W
3454	4822 050 11002	1k 1% 0.4W
3455	4822 051 10122	1k2 2% 0.25W
3456▲	4822 051 10103	10k 2% 0.25W
3457	4822 116 83726	27k 5% 0.125W
3458	4822 117 11455	7k87 1%
3459	4822 116 52304	82k 5% 0.5W
3460	4822 116 52271	33k 5% 0.5W
3461	4822 100 10436	22k CARB LIN 0.1W
3462	4822 116 52257	22k 5% 0.5W
3463	4822 116 52251	18k 5% 0.5W
3464	4822 051 10123	12k 2% 0.25W

BTB = Board To Board; WTB = Wire To Board

3465	4822 051 10394	390k 2% 0.25W
3466	4822 051 10681	680Ω 2% 0.25W
3467	4822 053 20275	2M7 5% 0.25W
3467	4822 053 20335	3M3 5% 0.25W
3468	4822 051 10682	6k8 2% 0.25W
3469	4822 051 10229	22Ω 2% 0.25W
3470▲	4822 116 52233	10k 5% 0.5W
3471	4822 116 52239	120k 5% 0.5W
3471	4822 116 52285	470k 5% 0.5W
3473	4822 116 52265	270k 5% 0.5W
3474	4822 051 10562	5k6 2% 0.25W
3475	4822 051 10184	180k 2% 0.25W
3476	4822 051 10104	100k 2% 0.25W
3477	4822 051 10008	0Ω 5% 0.25W
3477	4822 051 10228	2Ω2 5% 0.25W
3478	4822 051 10008	0Ω 5% 0.25W
3478	4822 051 10478	4Ω7 5% 0.25W
3479▲	4822 116 52219	330Ω 5% 0.5W
3480	4822 050 11002	1k 1% 0.4W
3481▲	4822 116 52283	4k7 5% 0.5W
3482▲	4822 116 52283	4k7 5% 0.5W
3483▲	4822 052 10339	33Ω 5% 0.33W
3484	4822 051 20183	18k 5% 0.1W
3485	4822 051 10682	6k8 2% 0.25W
3486	4822 051 10182	1k8 2% 0.25W
3487	4822 116 52231	820Ω 5% 0.5W
3488	4822 051 10471	470Ω 2% 0.25W
3489	4822 051 10008	0Ω 5% 0.25W
3490	4822 116 52296	6k8 5% 0.5W
3501	4822 051 10229	22Ω 2% 0.25W
3501	4822 051 10279	27Ω 2% 0.25W
3502▲	4822 053 10122	1k2 5% 1W
3502▲	4822 053 10272	2k7 5% 1W
3503▲	4822 052 10128	1Ω2 5% 0.33W
3503▲	4822 052 10478	4Ω7 5% 0.33W
3504	4822 100 11684	100Ω 10% 0.1W
3505	4822 051 10471	470Ω 2% 0.25W
3506	4822 051 10334	330k 2% 0.25W
3507	4822 051 10223	22k 2% 0.25W
3507	4822 051 10273	27k 2% 0.25W
3508	4822 051 10228	2Ω2 5% 0.25W
3509	4822 051 10228	2Ω2 5% 0.25W
3510	4822 051 10228	2Ω2 5% 0.25W
3511	4822 051 10228	2Ω2 5% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3513▲	4822 053 10331	330Ω 5% 1W
3514	4822 051 10182	1k8 2% 0.25W
3515	4822 051 10228	2Ω2 5% 0.25W
3516	4822 100 10436	22k CARB LIN 0.1W
3517	4822 051 10228	2Ω2 5% 0.25W
3519	4822 051 10228	2Ω2 5% 0.25W
3520▲	4822 116 52283	4k7 5% 0.5W
3523	4822 051 10228	2Ω2 5% 0.25W
3529	4822 051 10228	2Ω2 5% 0.25W
3535	4822 051 10151	150Ω 2% 0.25W
3535	4822 051 51201	120Ω 1% 0.125W
3537	4822 116 52234	100Ω 5% 0.5W
3539	4822 053 20474	470k 5% 0.25W
3540	4822 051 51201	120Ω 1% 0.125W
3541	4822 116 52257	22k 5% 0.5W
3542	4822 051 10102	1k 2% 0.25W
3542	4822 051 10272	2k7 2% 0.25W
3543	4822 116 52175	100Ω 5% 0.5W
3545	4822 113 80576	180Ω 10% 5W
3545	4822 113 80668	330Ω 5% 5W
3546	4822 116 52206	120Ω 5% 0.5W
3546	4822 116 52213	180Ω 5% 0.5W
3548	4822 116 52175	100Ω 5% 0.5W
3549	4822 050 21203	12k 1% 0.6W
3550	4822 050 21203	12k 1% 0.6W
3551▲	4822 050 25601	560Ω 1% 0.6W
3552▲	4822 050 25601	560Ω 1% 0.6W
3553▲	4822 052 10561	560Ω 5% 0.33W
3560	4822 116 52244	15k 5% 0.5W
3560	4822 116 52271	33k 5% 0.5W
3561	4822 051 10332	3k3 2% 0.25W
3561	4822 051 20222	2k2 5% 0.1W
3570▲	4822 052 10688	6Ω8 5% 0.33W
3588▲	4822 052 10271	270Ω 5% 0.33W
3589▲	4822 052 10271	270Ω 5% 0.33W
3590▲	4822 116 52272	330k 5% 0.5W
3591	4822 051 10682	6k8 2% 0.25W
3592	4822 051 10681	680Ω 2% 0.25W
3604▲	4822 113 80593	1.5Ω 10% 5W
3606▲	4822 052 10102	1k 5% 0.33W
3610▲	4822 052 10688	6Ω8 5% 0.33W
3610▲	4822 052 10828	8Ω2 5% 0.33W
3616▲	4822 050 24708	4Ω7 1% 0.6W
3617	4822 116 52213	180Ω 5% 0.5W
3619	4822 116 52182	15Ω 5% 0.5W
3620	4822 053 12121	120Ω 5% 3W
3621▲	4822 053 12279	27Ω 5% 3W
3621	4822 053 12479	47Ω 5% 3W
3622	4822 053 12479	47Ω 5% 3W
3626	4822 113 80565	180Ω 5% 5W
3631	4822 050 21204	120k 1% 0.6W
3631	4822 050 22204	220k 1% 0.6W
3634	4822 051 10272	2k7 2% 0.25W
3634	4822 051 10332	3k3 2% 0.25W
3635	4822 101 11187	1k 30% LIN 0.1W
3637	4822 116 52175	100Ω 5% 0.5W
3659	4822 051 10181	180Ω 2% 0.25W
3675	4822 116 52239	120k 5% 0.5W
3675	4822 116 52284	47k 5% 0.5W
3677	4822 051 10108	1Ω 5% 0.25W
3678▲	4822 116 52283	4k7 5% 0.5W
3682▲	4822 053 10561	560Ω 5% 1W
3700	4822 116 52257	22k 5% 0.5W
3706▲	4822 051 10103	10k 2% 0.25W
3707	4822 051 10101	100Ω 2% 0.25W
3708▲	4822 051 10103	10k 2% 0.25W
3708	4822 051 10223	22k 2% 0.25W
3709▲	4822 116 52283	4k7 5% 0.5W
3710	4822 051 10104	100k 2% 0.25W
3718▲	4822 116 52215	220Ω 5% 0.5W
3719▲	4822 116 52215	220Ω 5% 0.5W
3721▲	4822 051 10103	10k 2% 0.25W
3722▲	4822 051 10103	10k 2% 0.25W
3724▲	4822 051 10103	10k 2% 0.25W
3725▲	4822 051 10103	10k 2% 0.25W
3727▲	4822 116 52217	270Ω 5% 0.5W
3728	4822 116 52175	100Ω 5% 0.5W
3729	4822 051 10911	910Ω 2% 0.25W
3730	4822 051 10221	220Ω 2% 0.25W
3732	4822 053 11103	10k 5% 2W
3732	4822 053 11332	3k3 5% 2W
3733	4822 050 23902	3k9 1% 0.6W
3734	4822 050 23902	3k9 1% 0.6W
3734▲	4822 116 52283	4k7 5% 0.5W
3736	4822 116 52175	100Ω 5% 0.5W
3737	4822 050 11002	1k 1% 0.4W
3741	4822 051 10123	12k 2% 0.25W
3742	4822 051 20222	2k2 5% 0.1W
3743▲	4822 051 10472	4k7 2% 0.25W
3746	4822 051 10123	12k 2% 0.25W
3747	4822 051 10822	8k2 2% 0.25W
3748	4822 051 10273	27k 2% 0.25W
3750▲	4822 051 10472	4k7 2% 0.25W
3751	4822 051 10153	15k 2% 0.25W
3752	4822 116 52244	15k 5% 0.5W
3753▲	4822 116 52283	4k7 5% 0.5W
3754	4822 051 10563	56k 2% 0.25W
3755	4822 051 10101	100Ω 2% 0.25W
3756	4822 051 10101	100Ω 2% 0.25W
3757	4822 051 10182	1k8 2% 0.25W
3758	4822 051 10182	1k8 2% 0.25W
3759▲	4822 051 10103	10k 2% 0.25W
3766	4822 116 52243	1k5 5% 0.5W
3767	4822 116 52243	1k5 5% 0.5W
3768	4822 051 10105	1M 5% 0.25W
3769	4822 116 52243	1k5 5% 0.5W
3770	4822 051 10473	47k 2% 0.25W
3771	4822 116 52251	18k 5% 0.5W
3772	4822 116 52276	3k9 5% 0.5W
3775	4822 051 10101	100Ω 2% 0.25W
3776	4822 051 10562	5k6 2% 0.25W
3779▲	4822 116 52233	10k 5% 0.5W
3780▲	4822 051 10103	10k 2% 0.25W
3781▲	4822 051 10472	4k7 2% 0.25W
3791	4822 051 10122	1k2 2% 0.25W
3792	4822 051 10122	1k2 2% 0.25W
3793	4822 051 10122	1k2 2% 0.25W
3794▲	4822 116 52215	220Ω 5% 0.5W
3850	4822 116 52201	75Ω 5% 0.5W
3851▲	4822 116 83953	75Ω 5% 0.125W
3852▲	4822 116 83953	75Ω 5% 0.125W
3853▲	4822 116 83953	75Ω 5% 0.125W
3854▲	4822 116 83953	75Ω 5% 0.125W
3855	4822 116 52201	75Ω 5% 0.5W
3856	4822 116 52175	100Ω 5% 0.5W
3860	4822 116 80176	1Ω 5% 0.5W
3861	4822 051 10159	15Ω 2% 0.25W
3862	4822 116 52218	300Ω 5% 0.5W
3863	4822 051 10223	22k 2% 0.25W
3864	4822 051 20222	2k2 5% 0.1W
3865	4822 116 52284	47k 5% 0.5W
3866	4822 051 10333	33k 2% 0.25W
3867▲	4822 116 52283	4k7 5% 0.5W
3868	4822 051 10394	390k 2% 0.25W
3872	4822 051 10102	1k 2% 0.25W
3886▲	4822 051 10472	4k7 2% 0.25W
3887	4822 050 11002	1k 1% 0.4W
3888	4822 116 52289	5k6 5% 0.5W
3890▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5001	4822 156 20966	47μH 10%
5240	4822 157 53066	15μH 10%
5242	4822 157 53066	15μH 10%
5301	4822 157 63075	7.95 μH 8%
5303	4822 157 70827	33μH -5%
5534▲	4822 157 62771	Coil 90°
5534▲	4822 158 10728	Coil 110°
5541▲	4822 157 63078	Driver transformer
5545▲	4822 140 10499	LOT-21"-90°
5545▲	4822 140 10501	LOT 25"/28" BLS
5549▲	4822 157 53069	Balance coil
5554▲	4822 156 50097	Linearity coil LC90
5554▲	4822 157 63079	Linearity coil AT4042
5563▲	4822 157 51462	10μH
5582	4822 157 70826	2.4μH
5588▲	4822 157 53252	Coil
5606▲	4822 157 53995	100μH 10%
5619	4822 156 21125	3.9μH 10%
5619	4822 157 53139	4.7μH
5625▲	4822 146 31062	SOPS transformer
5630	4822 157 70826	2.4μH
5631	4822 158 10551	27μH
5632	4822 157 53066	15μH 10%
5675	4822 157 70826	2.4μH
5701	4822 157 53253	27μH 5%
5703	4822 156 20915	33μH

▶|

6204▲	4822 130 30621	1N4148
6245	4822 130 80446	LL4148
6246	4822 130 81139	LLZ-C3V3
6247	4822 130 81139	LLZ-C3V3
6248_	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6302	4822 130 82192	LLZ-C8V2
6303	4822 130 34382	BZX79-C8V2
6310	4822 130 80884	LLZ-C5V1
6314	4822 130 80446	LL4148
6315▲	4822 130 30621	1N4148
6317	4822 130 80446	LL4148
6319	4822 130 34379	BZX79-C27
6320	4822 130 80877	BAV103
6322▲	4822 130 30621	1N4148
6332	4822 130 82583	LLZ-C9V1
6367	4822 130 80954	LLZ-C5V6
6464	4822 130 81015	LLZ-C10
6483▲	4822 130 30621	1N4148
6503	4822 130 42488	BYD33D
6504	4822 130 80446	LL4148
6505	4822 130 80446	LL4148
6542	4822 130 81222	LLZ-C15
6542	4822 130 82345	LLZ-C22
6546▲	4822 130 83342	BY228
6547▲	4822 130 41602	BYW95C/20
6549▲	4822 130 31983	BAT85
6551	4822 130 42489	BYD33G
6560	4822 130 80446	LL4148
6561	4822 130 30864	BZX79-C68
6563▲	4822 130 80915	BYD74C
6570	4822 130 42489	BYD33G
6571	4822 130 42488	BYD33D
6580	4822 130 80791	BYV28-200/20
6585	4822 130 42489	BYD33G
6590	4822 130 80881	LLZ-C33
6591▲	4822 130 30621	1N4148
6592	4822 130 81144	LLZ-C30
6592	4822 130 82346	LLZ-C27
6610	4822 130 80446	LL4148
6611▲	5322 130 80442	BZV85-C16
6612	4822 130 42488	BYD33D
6615	4822 130 80446	LL4148
6617	4822 130 31456	BZV85-C5V1
6621	4822 130 42488	BYD33D
6622▲	4822 130 30621	1N4148
6624▲	4822 130 31933	1N5061
6625▲	4822 130 31933	1N5061
6630▲	4822 130 33531	BY229F-600
6630▲	4822 130 81175	BYD74G
6640	4822 130 80914	BYD74B
6641	4822 130 80914	BYD74B
6661	4822 130 42488	BYD33D
6666	4822 130 34329	BZX79-C43
6666	4822 130 34368	BZX79-C36
6675	4822 130 80914	BYD74B
6704	4822 130 80446	LL4148
6705	4822 130 80905	LLZ-F5V1
6708	4822 130 81145	LLZ-F2V4
6709	4822 130 34142	BZX79-B33
6860	4822 130 82334	BAS85
6861▲	4822 130 30621	1N4148
6862	4822 130 80446	LL4148

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7003	4822 130 42133	BC817
7200	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	5322 130 42136	BC848C
7240	4822 209 73853	TDA1521/N4
7243	4822 130 42513	BC858C
7244	4822 130 42513	BC858C
7248	5322 130 42136	BC848C
7249	5322 130 42136	BC848C
7301	5322 130 42136	BC848C
7302	4822 130 42513	BC858C
7303	4822 130 40855	BC337
7304	5322 130 42718	BFS20
7305	4822 209 30389	TDA4510/V8
7306	4822 209 33671	TDA4657/V2
7307	4822 209 12635	TDA4665/V3
7308	4822 209 32593	TDA4671/V1
7309	4822 209 33725	TDA4780/V2
7310	5322 130 42136	BC848C
7311	5322 130 42136	BC848C
7312	5322 130 42136	BC848C
7370	5322 130 42136	BC848C
7454	5322 130 41983	BC858B
7455	4822 130 60136	BC856
7456	5322 130 60159	BC846B
7470	4822 209 63423	TDA2579B/N2
7471	5322 130 42136	BC848C
7500▲	4822 130 41344	BC337-40
7502	4822 130 60775	2SD1266P
7503	4822 130 63508	BD536FI
7504▲	4822 130 41344	BC337-40
7505	4822 130 41327	BC327-40
7540▲	4822 130 41344	BC337-40
7545▲	4822 130 61265	BU508AF
7546▲	5322 130 41982	BC848B
7591	5322 130 41983	BC858B
7625▲	4822 130 62735	BUT12AF
7700▲	5322 130 41982	BC848B
7703▲	5322 130 41982	BC848B
7704▲	5322 130 41982	BC848B
7706▲	5322 130 41982	BC848B
7707▲	5322 130 41982	BC848B
7708	4822 209 52642	VERSION-1.2 EUROPA
7708	4822 209 52643	VERSION-1.2-EAST
7710	4822 209 32283	ST24C08B
7850	5322 130 42136	BC848C
7860	5322 130 42136	BC848C
7861	5322 130 42136	BC848C
7886	5322 130 42136	BC848C

1060 Seperate control module [A/B]

Various

	4822 267 40696	3P male vert white
	4822 265 31135	5P male vert black
	4822 267 50621	7P male vert white
	4822 256 92101	Bracket sep control module
	4822 267 31014	Jackplug stereo
	4822 276 30422	Switch 3-fold
1060	4822 212 31627	Seperate control module

⊣⊢

2200	4822 122 31211	100pF 10% 500V
2203	4822 122 31211	100pF 10% 500V
2233	4822 121 41856	22nF 5% 250V
2234	4822 121 41856	22nF 5% 250V
2240	5322 122 32175	270pF 10% 100V

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3200▲	4822 050 21002	1k 1% 0.6W
3202▲	4822 050 21002	1k 1% 0.6W
3246	4822 116 52176	10Ω 5% 0.5W
3247	4822 116 52224	470Ω 5% 0.5W
3248	4822 116 52176	10Ω 5% 0.5W
3249	4822 116 52224	470Ω 5% 0.5W
3775	4822 116 52175	100Ω 5% 0.5W
3776	4822 116 52289	5k6 5% 0.5W
3779▲	4822 116 52233	10k 5% 0.5W
3851	4822 116 80176	1Ω 5% 0.5W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

→|–

6200	4822 130 31981	BZX79-F3V9
6201	4822 130 31981	BZX79-F3V9
6202	4822 130 31981	BZX79-F3V9
6203	4822 130 31981	BZX79-F3V9

1002 Mains filter module [D]

Various

	4822 265 30389	2P male vert yellow
	4822 265 30877	3P male vertB
	4822 267 40794	3P female vert grey WTB
	4822 290 40288	Snap connector
	4822 404 31317	Mains filter module bracket
1002	4822 212 30975	Mains filter module

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2602	4822 126 11141	2.2nF 10% 1K
2604	4822 126 11141	2.2nF 10% 1K

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3601	4822 116 40211	P.T.C.
3603	4822 117 10492	10M 5%
3605	4822 052 10102	1k 5% 0.33
3607	4822 050 23901	390Ω 1% 0.6
3608	4822 116 21213	VDR 1mA/275V

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5600	4822 157 63073	Mains filter
5605	4822 157 53995	100µH 10%

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6602	4822 130 31933	1N5061
6603	4822 130 31933	1N5061
6604	4822 130 31933	1N5061
6605	4822 130 31933	1N5061
6609	4822 130 34281	BZX79-F15
6610	4822 130 34281	BZX79-F15

1005 Picture tube (CRT) module [E]

Various

	4822 265 31133	3P male white
	4822 265 30378	4P male grey
	4822 265 50824	4P female grey
	4822 290 40283	5P male grey
	4822 290 40287	5P female green
	4822 290 40295	7P male grey
	4822 267 51275	7P female white
	4822 265 40252	7P female grey
	4822 267 51033	Single connector
	4822 492 70871	Spring
	4822 256 91879	Holder
▲	4822 255 70261	CRT-socket
1005	4822 212 31629	CRT module 90° narrow neck
1005	4822 212 31628	CRT module 110° BL-S

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2301	4822 122 31769	18pF 2% 63V
2301	4822 126 10324	33pF 2% 63V
2331	4822 122 31769	18pF 2% 63V
2331	4822 126 10324	33pF 2% 63V
2344▲	4822 124 40246	4.7µF 20% 63V
2361	4822 122 31825	27pF 2% 63V
2361	4822 122 32504	15pF 2% 63V
2391	4822 121 43878	27pF 2% 500V
2392	4822 124 80213	4.7µF 20% 100V
2393	4822 122 32542	47nF 10% 63V
2411▲	4822 124 80067	4.7µF 20% 63V
2421	4822 122 32482	22pF 2% 63V
2431	4822 121 41689	100nF 10% 250V
2432	5322 124 41378	33µF 20% 35V
2433▲	4822 126 12274	1500pF 10%R(HR) 2KV
2434	5322 122 32334	220pF 10% 100V
2520	5322 124 41299	68µF 20% 25V
2521	4822 122 32891	68nF 10% 63V
2522	5322 121 42661	330nF 5% 63V
2523	4822 122 31981	33nF +-0.5pF 50V
2526	4822 121 51093	6.8nF 5% 250V
2531	4822 121 42408	220nF 5% 63V
2531	4822 121 43396	120nF 5% 63V
2532	4822 124 80066	1µF 20% 63V
2532▲	4822 124 80067	4.7µF 20% 63V
2533	4822 124 40242	1µF 20% 63V
2534	5322 122 31647	1nF 10% 63V

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3301	4822 051 10131	130Ω 2% 0.25W
3302	4822 051 10182	1k8 2% 0.25W
3302	4822 051 10362	3k6 2% 0.25W
3303▲	4822 051 10242	2k4 2% 0.25W
3303	4822 051 10272	2k7 2% 0.25W
3304	4822 116 52239	120k 5% 0.5W
3305	4822 051 10154	150k 2% 0.25W
3305	4822 051 10823	82k 2% 0.25W
3306▲	4822 116 52219	330Ω 5% 0.5W
3309	4822 051 10108	1Ω 5% 0.25W
3309	4822 051 10479	47Ω 2% 0.25W
3310▲	4822 116 52219	330Ω 5% 0.5W
3311▲	4822 053 12153	15k 5% 3W
3312▲	4822 052 10271	270Ω 5% 0.33W
3313▲	4822 052 10271	270Ω 5% 0.33W
3314	4822 050 21502	1k5 1% 0.6W
3315	4822 051 10184	180k 2% 0.25W
3315	4822 051 10823	82k 2% 0.25W
3316	4822 051 10224	220k 2% 0.25W
3316	4822 051 10823	82k 2% 0.25W
3331	4822 051 10131	130Ω 2% 0.25W
3332	4822 051 10182	1k8 2% 0.25W
3332	4822 051 10362	3k6 2% 0.25W
3333	4822 116 52259	2k4 5% 0.5W
3333▲	4822 116 52263	2k7 5% 0.5W
3334	4822 116 52239	120k 5% 0.5W
3338	4822 051 10108	1Ω 5% 0.25W
3338	4822 051 10479	47Ω 2% 0.25W
3340▲	4822 116 52219	330Ω 5% 0.5W
3341▲	4822 053 12153	15k 5% 3W
3342▲	4822 052 10271	270Ω 5% 0.33W
3343▲	4822 052 10271	270Ω 5% 0.33W
3344	4822 050 21502	1k5 1% 0.6W
3345	4822 051 10681	680Ω 2% 0.25W
3361	4822 116 52208	130Ω 5% 0.5W
3362	4822 051 10182	1k8 2% 0.25W
3362	4822 051 10362	3k6 2% 0.25W
3364▲	4822 051 10472	4k7 2% 0.25W
3368	4822 051 10108	1Ω 5% 0.25W
3368	4822 051 10479	47Ω 2% 0.25W
3370▲	4822 116 52219	330Ω 5% 0.5W
3371▲	4822 053 12153	15k 5% 3W
3372▲	4822 052 10271	270Ω 5% 0.33W
3373▲	4822 052 10271	270Ω 5% 0.33W
3374	4822 050 21502	1k5 1% 0.6W
3375	4822 051 10184	180k 2% 0.25W
3375	4822 051 10823	82k 2% 0.25W
3376	4822 051 10224	220k 2% 0.25W
3376	4822 051 10823	82k 2% 0.25W
3382	4822 051 10102	1k 2% 0.25W
3383	4822 116 52284	47k 5% 0.5W
3384	4822 116 52277	39k 5% 0.5W
3385	4822 051 10473	47k 2% 0.25W
3391	4822 116 52284	47k 5% 0.5W
3392	4822 051 10123	12k 2% 0.25W
3395	4822 051 10122	1k2 2% 0.25W
3396	4822 051 10104	100k 2% 0.25W
3398	4822 051 10008	0Ω 5% 0.25W
3411	4822 116 52222	390Ω 5% 0.5W
3413	4822 116 52222	390Ω 5% 0.5W
3414	4822 051 10439	43Ω 2% 0.25W
3415	4822 116 52222	390Ω 5% 0.5W
3421	4822 051 10154	150k 2% 0.25W
3424	4822 051 20222	2k2 5% 0.1W
3431▲	4822 052 10181	180Ω 5% 0.33W
3431▲	4822 052 10271	270Ω 5% 0.33W
3432▲	4822 052 10229	22Ω 5% 0.33W
3433▲	4822 052 10128	1Ω2 5% 0.33W
3433▲	4822 052 10188	1Ω8 5% 0.33W
3434	4822 050 21502	1k5 1% 0.6W
3435	4822 050 21502	1k5 1% 0.6W
3436	4822 053 20825	8M2 5% 0.25W
3442	4822 116 52239	120k 5% 0.5W
3443▲	4822 051 10242	2k4 2% 0.25W
3443	4822 051 10272	2k7 2% 0.25W
3446	4822 051 10683	68k 2% 0.25W
3447	4822 051 10102	1k 2% 0.25W
3448	4822 051 10008	0Ω 5% 0.25W
3455	4822 051 10102	1k 2% 0.25W
3456	4822 050 11002	1k 1% 0.4W
3457	4822 051 10244	240k 2% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3518	4822 051 10151	150Ω 2% 0.25W
3520	4822 116 52211	150Ω 5% 0.5W
3521	4822 101 20902	4k7 10% LIN 0.05W
3522	4822 051 10152	1k5 2% 0.25W
3524	4822 051 10683	68k 2% 0.25W
3525	4822 100 20169	10k 10% LIN 0.05W
3525	4822 100 20644	22k 10% LIN 0.05W
3526	4822 050 26803	68k 1% 0.6W
3526	4822 050 26804	680k 1% 0.6W
3527	4822 051 10274	270k 2% 0.25W
3528	4822 051 20222	2k2 5% 0.1W
3529	4822 051 10008	0Ω 5% 0.25W
3529	4822 051 10471	470Ω 2% 0.25W
3530	4822 051 10008	0Ω 5% 0.25W
3530	4822 051 10102	1k 2% 0.25W
3531	4822 051 10008	0Ω 5% 0.25W
3531	4822 051 10104	100k 2% 0.25W
3532▲	4822 051 10103	10k 2% 0.25W
3533	4822 116 52207	1k2 5% 0.5W
3533	4822 116 52303	8k2 5% 0.5W
3534▲	4822 052 10828	8Ω2 5% 0.33W
3535	4822 051 10008	0Ω 5% 0.25W
3535	4822 051 10474	470k 2% 0.25W
3571	4822 051 10273	27k 2% 0.25W
3572	4822 051 10153	15k 2% 0.25W
3575	4822 051 10182	1k8 2% 0.25W
3578	4822 116 52245	150k 5% 0.5W
3580▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5401	4822 156 20966	47µH
5401	4822 157 71295	100µH
5530	4822 152 20559	390µH 10%

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6301	4822 130 30842	BAV21
6302	4822 130 81015	LLZ-C10
6303	4822 130 80877	BAV103
6331	4822 130 80877	BAV103
6345	4822 130 82192	LLZ-C8V2
6361	4822 130 30842	BAV21
6383	4822 130 80446	LL4148
6411	4822 130 32831	BZX79-F3V0
6421▲	4822 130 30621	1N4148
6422	4822 130 81512	LLZ-C6V2
6423	4822 130 34382	BZX79-F8V2
6518	4822 130 80446	LL4148
6519	4822 130 80446	LL4148

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7302	4822 130 41773	BF869
7303▲	5322 130 41982	BC848B
7304	4822 130 41782	BF422
7305	4822 130 41646	BF423
7331	4822 130 41773	BF869
7333▲	5322 130 41982	BC848B
7334	4822 130 41782	BF422
7335	4822 130 41646	BF423
7345	5322 130 41983	BC858B
7361	4822 130 41773	BF869
7363▲	5322 130 41982	BC848B
7364	4822 130 41782	BF422
7365	4822 130 41646	BF423
7383	4822 130 41782	BF422
7391	4822 130 41646	BF423
7411	4822 130 40937	BC548B
7530	5322 130 60159	BC846B
7533	4822 130 63015	BD440
7534	4822 130 44283	BC636
7537▲	5322 130 41982	BC848B
7538▲	5322 130 41982	BC848B

1003 Euro module [F]

Various

	4822 267 30631	2P cinch female
	4822 267 50621	7P male white
▲	4822 267 50721	9P male white
▲	4822 267 60243	Euroconnector blue
	4822 256 91879	Holder
1003	4822 212 31624	Euro module (non teletext)
1003	4822 212 31625	Euro module (teletext)
1003	4822 212 31626	Euro module (3^{RD} scart + teletext)
1816▲	4822 252 51169	Fuse 250 mA
1910	4822 242 73552	Crystal 13.875MHz

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2200	4822 121 51299	1nF 10% 50V
2201▲	4822 124 40433	47µF 20% 25V
2202	4822 121 51299	1nF 10% 50V
2203▲	4822 124 40433	47µF 20% 25V
2204	4822 122 31211	100pF 10% 500V
2205	4822 121 51252	470nF 5% 63V
2206	4822 122 31211	100pF 10% 500V
2207	4822 121 51252	470nF 5% 63V
2208	4822 121 51252	470nF 5% 63V
2209	4822 121 51252	470nF 5% 63V
2210	4822 121 51252	470nF 5% 63V
2211▲	4822 124 40433	47µF 20% 25V
2212▲	4822 124 40433	47µF 20% 25V
2213	4822 121 41857	10nF 5% 250V
2214	4822 121 41857	10nF 5% 250V
2215	5322 124 41431	22µF 20% 35V
2216	5322 124 41431	22µF 20% 35V
2217	4822 124 40198	470µF 20% 16V
2218	5322 124 41431	22µF 20% 35V
2219	5322 124 41431	22µF 20% 35V
2220	4822 122 31116	2.2nF 10% 500V
2221	4822 122 31116	2.2nF 10% 500V
2222	4822 122 31116	2.2nF 10% 500V
2223	4822 122 31116	2.2nF 10% 500V
2800	4822 124 41643	100µF 20% 16V
2805	4822 124 40198	470µF 20% 16V
2806	5322 124 41431	22µF 20% 35V
2807▲	4822 124 40246	4.7µF 20% 63V
2808▲	4822 124 40246	4.7µF 20% 63V
2810	4822 124 41643	100µF 20% 16V
2813▲	4822 124 40246	4.7µF 20% 63V
2814	4822 121 41856	22nF 5% 250V
2822	4822 126 13161	100nF 10% 25V
2825	4822 122 32139	12pF 2% 63V
2826	4822 122 32139	12pF 2% 63V
2830	5322 121 42386	100nF 5% 63V
2832	5322 122 32531	100pF 5% 50V
2833▲	4822 124 40196	220µF 20% 16V
2834	4822 126 12944	47nF 10% 50V
2835▲	4822 124 40246	4.7µF 20% 63V
2837	5322 122 32269	6.8pF 5% 50V
2838	4822 124 41643	100µF 20% 16V
2890	4822 126 13161	100nF 10% 25V
2900▲	4822 124 40246	4.7µF 20% 63V
2901▲	4822 124 40433	47µF 20% 25V
2908	4822 122 31211	100pF 10% 500V
2909	4822 122 31211	100pF 10% 500V
2910▲	4822 122 33177	10nF 20% 50V
2911	5322 126 10794	220pF 5% 63V
2912	5322 122 32481	15pF 5% 50V
2913	5322 122 32481	15pF 5% 50V
2914	4822 126 13161	100nF 10% 25V
2915	4822 126 13161	100nF 10% 25V
2916	5322 126 10794	220pF 5% 63V
2917▲	4822 122 33177	10nF 20% 50V
2918	5322 122 32452	47pF 5% 63V
2920	4822 126 13161	100nF 10% 25V
2925▲	4822 122 33177	10nF 20% 50V
2926	5322 124 41431	22µF 20% 35V
2927	4822 124 41643	100µF 20% 16V

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3200	4822 116 52211	150Ω 5% 0.5W
3201	4822 051 20563	56k 5% 0.1W
3202	4822 116 52211	150Ω 5% 0.5W
3203	4822 051 20563	56k 5% 0.1W
3204	4822 050 11002	1k 1% 0.4W
3205	4822 050 11002	1k 1% 0.4W
3206	4822 051 20334	330k 5% 0.1W
3207	4822 051 20334	330k 5% 0.1W
3208▲	4822 116 52272	330k 5% 0.5W
3209	4822 051 20334	330k 5% 0.1W
3210	4822 051 20333	33k 5% 0.1W
3211	4822 051 20332	3k3 5% 0.1W
3212	4822 051 20333	33k 5% 0.1W
3213	4822 051 20332	3k3 5% 0.1W
3214	4822 051 20563	56k 5% 0.1W
3215	4822 051 20563	56k 5% 0.1W
3216	4822 116 52201	75Ω 5% 0.5W
3217	4822 116 52201	75Ω 5% 0.5W
3218	4822 051 20153	15k 5% 0.1W
3220	4822 051 20153	15k 5% 0.1W
3222	4822 051 20562	5k6 5% 0.1W
3223	4822 051 20562	5k6 5% 0.1W
3224	4822 051 20562	5k6 5% 0.1W

BTB = Board To Board; WTB = Wire To Board

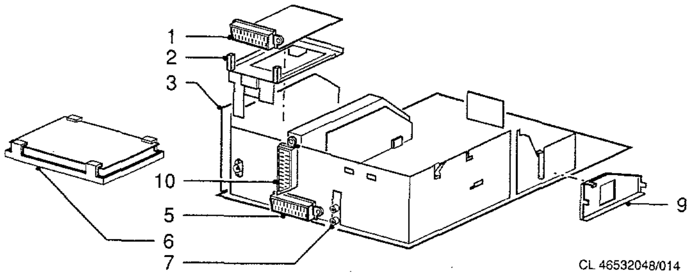
Spare parts list / Stükliste / Liste des pièces

3966	4822 051 20332	3k3 5% 0.1W
3967	4822 051 20104	100k 5% 0.1W
3968	4822 051 20104	100k 5% 0.1W
3969	4822 051 20683	68k 5% 0.1W
3970	4822 051 20683	68k 5% 0.1W
3971	4822 051 20153	15k 5% 0.1W
3972▲	4822 116 52233	10k 5% 0.5W
3973	4822 051 20222	2k2 5% 0.1W
3974	4822 116 80173	10k 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 050 11002	1k 1% 0.4W
3977	4822 116 52175	100Ω 5% 0.5W
3978	4822 116 52201	75Ω 5% 0.5W
3979	4822 116 52175	100Ω 5% 0.5W
3980	4822 051 20221	220Ω 5% 0.1W
3981	4822 051 20471	470Ω 5% 0.1W
3982	4822 051 20101	100Ω 5% 0.1W
3983	4822 051 20471	470Ω 5% 0.1W
3985▲	4822 116 52256	2k2 5% 0.5W
3986	4822 116 52296	6k8 5% 0.5W
3987	4822 116 80175	4k7 5% 0.5W
3988	4822 051 20182	1k8 5% 0.1W
3989	4822 051 20182	1k8 5% 0.1W
3990	4822 116 52175	100Ω 5% 0.5W
3991	4822 116 52211	150Ω 5% 0.5W
3992	4822 116 52211	150Ω 5% 0.5W

5950	4822 157 53634	5.6μH 10%

6950	4822 130 80446	LL4148

7950	5322 209 10576	HEF4053BP
7951	5322 130 42136	BC848C
7952	5322 130 42136	BC848C
7953	5322 130 42136	BC848C
7954	5322 130 42136	BC848C
7975	5322 130 42136	BC848C
7976	5322 130 42136	BC848C
7977	4822 130 42513	BC858C
7978	4822 130 42513	BC858C
7979	5322 130 42136	BC848C



CL 46532048/014
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Mechanical parts list

1	*4822 267 60366*	*Third scart* euroconnector
2	4822 404 31322	3rd scart holder
3	Not applicable	
5	4822 267 60243	Euroconnector
6	4822 403 70926	Sep. mains holder
7	*4822 267 30631*	2 *Fold cinch*
9	4822 404 31317	Mains filter bracket
10	4822 267 60243	Euroconnector

BTB = Board To Board; WTB = Wire To Board

1003 IF module [J/K/L/M]

Various

	4822 265 31059	5P red
1003	4822 212 31618	IF module Nicam PAL I
1003	4822 212 31619	IF module Stereo PAL BG
1003	4822 212 31621	IF module Nicam PAL BG
1003	4822 212 31622	IF module Stereo P/S BGLI
1003	4822 212 31623	IF module Stereo P/S BG/DK
1000	4822 242 80295	SAW 38.9 MHz Stereo PAL BG
1000	4822 242 81436	SAW 38.9 MHz Stereo P/S
1000	4822 242 81717	SAW 38.9 MHz NICAM PAL BG
1000	4822 242 81718	SAW 38.9 MHz NICAM PAL I
1001	4822 153 30025	6.0 MHz
1001	4822 242 72211	5.5 MHz
1100	4822 242 70714	5.5 MHz
1100	4822 242 71713	6.0 MHz
1101	4822 242 70485	5.74 MHz
1102	4822 242 70714	5.5 MHz
1102	4822 242 71713	6.0 MHz
1102	4822 242 72057	6.5 MHz
1103	4822 242 81423	38.9 MHz P/S BGLI
1103	4822 242 81716	38.9 MHz P/S BGDK
1104	4822 242 81715	33.4 MHz
1200	4822 242 81813	Crystal 10 MHz
1300	4822 242 81187	Crystal 11.700 MHz
1300	4822 242 81188	Crystal 13.104 MHz
1301	4822 242 81719	Crystal 8.192 MHz
1302	4822 242 72301	TH316BOM-20800 DAF
1302	4822 242 72303	TH316BQM

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2000	4822 126 13159	180pF 5% 50V
2001	4822 126 13162	56pF 5% 50V
2002	4822 126 13161	100nF 10% 25V
2003	4822 124 41576	2.2µF 20% 50V
2004	4822 122 32927	220nF 20% 50V
2004	4822 126 13061	220nF 20% 25V
2005▲	5322 126 10223	4.7nF 10% 63V
2007	5322 122 31866	6.8nF 10% 63V
2007▲	5322 126 10223	4.7nF 10% 63V
2008	4822 126 13161	100nF 10% 25V
2008	4822 126 13346	39nF 10% 50V
2009	4822 124 41576	2.2µF 20% 50V
2010▲	4822 124 40246	4.7µF 20% 63V
2010▲	4822 124 40433	47µF 20% 25V
2011	5322 122 32269	6.8pF 5% 50V
2011	5322 122 32286	3.3pF 5% 50V
2012▲	4822 122 33177	10nF 20% 50V
2013	4822 126 13161	100nF 10% 25V
2014	4822 122 33496	100nF 10% 63V
2015	4822 124 41643	100µF 20% 16V
2016▲	4822 122 33177	10nF 20% 50V
2017	4822 126 13161	100nF 10% 25V
2018	4822 122 32646	5.6nF 10% 50V
2018	4822 126 13161	100nF 10% 25V
2020	5322 122 33537	1.2pF 5% 63V
2021	5322 122 33063	2.2pF 5% 50V
2100	5322 124 41431	22µF 20% 35V
2101	5322 124 41431	22µF 20% 35V
2102▲	5322 126 10223	4.7nF 10% 63V
2103▲	5322 126 10223	4.7nF 10% 63V
2106▲	5322 126 10223	4.7nF 10% 63V
2107	4822 124 41576	2.2µF 20% 50V
2108▲	5322 126 10223	4.7nF 10% 63V
2200	4822 122 33219	1.8nF 10% 50V
2201	4822 051 10008	Jumper
2202▲	4822 122 33177	10nF 20% 50V
2203	4822 126 13161	100nF 10% 25V
2204	4822 126 13161	100nF 10% 25V
2205▲	4822 122 33342	33nF 10% 63V
2206	4822 122 32646	5.6nF 10% 50V
2207	4822 122 32646	5.6nF 10% 50V
2208▲	4822 122 33342	33nF 10% 63V
2209	4822 122 33128	15nF 10% 63V
2210	4822 122 33128	15nF 10% 63V
2211	4822 126 13161	100nF 10% 25V
2212	4822 126 13161	100nF 10% 25V
2214	4822 124 40248	10µF 20% 63V
2215▲	4822 124 40196	220µF 20% 16V
2216▲	4822 124 40246	4.7µF 20% 63V
2217	4822 124 41643	100µF 20% 16V
2218▲	4822 124 40433	47µF 20% 25V
2219▲	4822 124 40246	4.7µF 20% 63V
2220▲	4822 124 40196	220µF 20% 16V
2221▲	4822 124 40196	220µF 20% 16V
2222	5322 121 42498	680nF 5% 63V
2223	5322 121 42498	680nF 5% 63V
2224	4822 122 32927	220nF 20% 50V
2225	4822 122 32927	220nF 20% 50V
2226	4822 124 41643	100µF 20% 16V
2227	4822 124 41643	100µF 20% 16V
2228	4822 124 41643	100µF 20% 16V
2228	4822 124 80702	100µF 20% 25V
2229	4822 124 41643	100µF 20% 16V
2230	5322 124 41431	22µF 20% 35V
2231	5322 124 41431	22µF 20% 35V
2232	5322 122 34098	10nF 10% 63V
2233	5322 122 34098	10nF 10% 63V
2234	4822 122 32927	220nF 20% 50V
2235	4822 122 32927	220nF 20% 50V
2236	4822 122 32927	220nF 20% 50V
2237	5322 124 41431	22µF 20% 35V
2238	5322 124 41431	22µF 20% 35V
2300	4822 121 42408	220nF 5% 63V
2301	4822 126 13161	100nF 10% 25V
2302	4822 126 13161	100nF 10% 25V
2303	4822 122 33514	68pF 5% 50V
2304	5322 122 31863	330pF 5% 50V
2305	4822 126 13161	100nF 10% 25V
2306	5322 122 33538	150pF 2% 63V
2307	5322 122 33538	150pF 2% 63V
2308▲	5322 122 34123	1nF 10% 50V
2309	4822 126 13161	100nF 10% 25V
2310	5322 122 31863	330pF 5% 50V
2311	5322 122 31866	6.8nF 10% 63V
2312	5322 122 31863	330pF 5% 50V
2313▲	4822 124 40433	47µF 20% 25V
2318	5322 122 31863	330pF 5% 50V
2319	4822 122 33514	68pF 5% 50V
2320▲	4822 122 33172	390pF 5% 50V
2321▲	5322 122 34123	1nF 10% 50V
2322▲	4822 122 33177	10nF 20% 50V
2323▲	5322 122 32654	22nF 10% 63V
2324	5322 121 42661	330nF 5% 63V
2325▲	5322 122 34123	1nF 10% 50V
2328▲	4822 122 33177	10nF 20% 50V
2329	5322 122 32659	33pF 5% 50V
2330	5322 122 32659	33pF 5% 50V
2331	5322 122 32531	100pF 5% 50V
2332	5322 122 32531	100pF 5% 50V
2333▲	4822 122 33177	10nF 20% 50V
2334	4822 126 13161	100nF 10% 25V
2335	4822 126 13161	100nF 10% 25V
2336▲	4822 124 40433	47µF 20% 25V
2340▲	4822 122 33177	10nF 20% 50V
2343	4822 122 33219	1.8nF 10% 50V
2343▲	5322 122 32654	22nF 10% 63V
2344	4822 122 33219	1.8nF 10% 50V
2344▲	5322 122 32654	22nF 10% 63V
2347	4822 124 41643	100µF 20% 16V

⊣▭⊢

3000	4822 116 52211	150Ω 5% 0.5W
3001	4822 101 11192	22k 30% LIN 0.1W
3002	4822 051 20181	180Ω 5% 0.1W
3004	4822 116 52289	5k6 5% 0.5W
3011	4822 051 20223	22k 5% 0.1W
3011	4822 116 52257	22k 5% 0.5W
3012	4822 051 20223	22k 5% 0.1W
3013	4822 051 20101	100Ω 5% 0.1W
3013	4822 051 20151	150Ω 5% 0.1W
3013	4822 051 20181	180Ω 5% 0.1W
3013	4822 051 20271	270Ω 5% 0.1W
3013	4822 051 20391	390Ω 5% 0.1W
3014	4822 051 20123	12k 5% 0.1W
3015	4822 051 20223	22k 5% 0.1W
3016	4822 051 20562	5k6 5% 0.1W
3018	4822 051 20106	10M 5% 0.1W
3019	4822 051 20474	470k 5% 0.1W
3024	4822 051 20562	5k6 5% 0.1W
3026▲	4822 052 10109	10Ω 5% 0.33W
3027	4822 051 20122	1k2 5% 0.1W
3031	4822 051 20222	2k2 5% 0.1W
3033	4822 053 10688	6Ω8 5% 1W
3034	4822 051 20101	100Ω 5% 0.1W
3098	4822 051 20104	100k 5% 0.1W
3098	4822 051 20223	22k 5% 0.1W
3098	4822 051 20224	220k 5% 0.1W
3098	4822 051 20564	560k 5% 0.1W
3098	4822 051 20822	8k2 5% 0.1W
3100	4822 051 20561	560Ω 5% 0.1W
3101	4822 051 20561	560Ω 5% 0.1W
3102	4822 051 20561	560Ω 5% 0.1W
3103	4822 051 20222	2k2 5% 0.1W
3104	4822 051 20103	10k 5% 0.1W
3106	4822 116 52234	100Ω 5% 0.5W
3107	4822 116 52234	100Ω 5% 0.5W
3108	4822 051 20471	470Ω 5% 0.1W
3109	4822 051 20471	470Ω 5% 0.1W
3113	4822 116 52234	100Ω 5% 0.5W
3114	4822 051 20103	10k 5% 0.1W
3115	4822 051 20103	10k 5% 0.1W
3116	4822 051 20103	10k 5% 0.1W
3117	4822 051 20222	2k2 5% 0.1W
3200	4822 051 10102	1k 2% 0.25W
3207	4822 051 20822	8k2 5% 0.1W
3208▲	4822 052 10181	180Ω 5% 0.33W
3211	4822 051 20122	1k2 5% 0.1W
3212	4822 051 20223	22k 5% 0.1W
3212	4822 051 20473	47k 5% 0.1W
3214	4822 051 20222	2k2 5% 0.1W
3218	4822 051 20474	470k 5% 0.1W
3219	4822 051 20564	560k 5% 0.1W
3220	4822 051 20563	56k 5% 0.1W
3221	4822 051 20563	56k 5% 0.1W
3222	4822 051 20823	82k 5% 0.1W
3223	4822 051 20333	33k 5% 0.1W
3224	4822 051 20101	100Ω 5% 0.1W
3225	4822 051 20101	100Ω 5% 0.1W
3230	4822 051 20562	5k6 5% 0.1W
3231	4822 051 20332	3k3 5% 0.1W
3232	4822 051 10102	1k 2% 0.25W
3233	4822 051 10102	1k 2% 0.25W
3234	4822 051 20101	100Ω 5% 0.1W
3234▲	4822 052 10181	180Ω 5% 0.33W
3235	4822 051 20101	100Ω 5% 0.1W
3237	4822 051 20823	82k 5% 0.1W
3238	4822 051 20333	33k 5% 0.1W
3240	4822 051 20101	100Ω 5% 0.1W
3241	4822 051 20101	100Ω 5% 0.1W
3300	4822 051 20563	56k 5% 0.1W
3301▲	4822 051 20109	10Ω 5% 0.1W
3302	4822 051 20228	2Ω2 5% 0.1W
3303	4822 051 20392	3k9 5% 0.1W
3304	4822 051 20223	22k 5% 0.1W
3305	4822 051 20223	22k 5% 0.1W
3306	4822 051 20104	100k 5% 0.1W
3307	4822 051 20159	15Ω 5% 0.1W
3308	4822 051 20224	220k 5% 0.1W
3309	4822 051 20823	82k 5% 0.1W
3314	4822 051 20471	470Ω 5% 0.1W
3315	4822 051 20563	56k 5% 0.1W
3316	4822 051 10102	1k 2% 0.25W
3317	4822 051 20105	1M 5% 0.1W
3318	4822 051 20223	22k 5% 0.1W
3319	4822 117 11139	1k5 1% 0.1W
3320	4822 051 20103	10k 5% 0.1W
3321	4822 051 20104	100k 5% 0.1W
3322	4822 051 20273	27k 5% 0.1W
3323	4822 051 20104	100k 5% 0.1W
3324	4822 051 20103	10k 5% 0.1W
3326	4822 051 20681	680Ω 5% 0.1W
3327	4822 051 20182	1k8 5% 0.1W
3328	4822 117 11139	1k5 1% 0.1W
3329	4822 051 20331	330Ω 5% 0.1W
3331	4822 051 20332	3k3 5% 0.1W
3332	4822 051 20332	3k3 5% 0.1W
3333	4822 116 52224	470Ω 5% 0.5W
3334	4822 051 20122	1k2 5% 0.1W
3335	4822 051 20471	470Ω 5% 0.1W
3336	4822 051 20101	100Ω 5% 0.1W
3337	4822 051 20101	100Ω 5% 0.1W
3340	4822 051 20122	1k2 5% 0.1W
3341	4822 051 20471	470Ω 5% 0.1W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5000	4822 157 61898	0.47µH 10%
5001	4822 157 71099	0.28µH 10%
5002	4822 157 53066	15µH 10%
5002	4822 157 53303	12µH 10%
5002	4822 157 53634	5.6µH 10%
5002	4822 157 62767	8.2µH
5004	4822 157 53302	1µH
5004	4822 157 53539	0.27µH 5%
5100	4822 157 71098	1.8µH
5201	4822 157 71296	1500µH
5300	4822 157 50975	1 mH
5301	4822 157 50975	1 mH

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6003	4822 130 80446	LL4148
6007	4822 130 80954	LLZ-C5V6
6007	4822 130 81227	LLZ-F5V6
6100	4822 130 80888	BA682
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6200	4822 130 80446	LL4148
6201	4822 130 80446	LL4148
6202	4822 130 82192	LLZ-C8V2
6203	4822 130 80446	LL4148
6204	4822 130 80446	LL4148
6205	4822 130 82192	LLZ-C8V2
6206	4822 130 80446	LL4148
6207	4822 130 80446	LL4148
6208	4822 130 80446	LL4148
6209	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6301	5322 130 34689	BBY31
6302	5322 130 80119	BBY40

⊗ ▭

7001	5322 209 10576	HEF4053BP
7004	4822 209 33707	TDA9815/V2
7005	5322 130 42136	BC848C
7008	4822 130 44121	BC338
7102	5322 130 42136	BC848C
7103	5322 130 42136	BC848C
7104	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	4822 130 42513	BC858C
7203	5322 130 42136	BC848C
7204	4822 209 33706	TDA9861/V1
7205	4822 209 32863	TDA9840/V2
7206	5322 130 42136	BC848C
7207	5322 130 42136	BC848C
7208	5322 130 42136	BC848C
7209	4822 130 42513	BC858C
7302	5322 130 42136	BC848C
7303	5322 130 42136	BC848C
7304	4822 209 30909	TDA8732/C1
7305	4822 209 32959	SAA7282AZP
7306	5322 130 42136	BC848C
7307	5322 130 42136	BC848C

1006 Third scart module [N]

Various

	4822 265 31214	3P male black
▲	4822 267 50721	9P male white
	4822 267 51276	9P female white
	4822 267 60366	Euroconnector
1006	4822 212 31631	Third scart module

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2950	4822 124 41643	100µF 20% 16V
2951	4822 122 31116	2.2nF 10% 500V
2952	4822 122 31116	2.2nF 10% 500V
2953	4822 122 31211	100pF 10% 500V
2954	4822 122 31211	100pF 10% 500V
2955	4822 121 51252	470nF 5% 63V
2956	4822 121 51252	470nF 5% 63V
2957	4822 121 51252	470nF 5% 63V
2958	4822 121 51252	470nF 5% 63V
2959	4822 121 51252	470nF 5% 63V
2960	4822 122 32927	220nF 20% 50V
2961	4822 122 32927	220nF 20% 50V
2962	4822 122 32927	220nF 20% 50V
2963	4822 122 32927	220nF 20% 50V
2964	4822 122 31116	2.2nF 10% 500V
2965	4822 122 31116	2.2nF 10% 500V
2975	4822 124 41643	100µF 20% 16V
2978▲	4822 124 40246	4.7µF 20% 63V
2980	4822 126 13161	100nF 10% 25V
2981	4822 121 41856	22nF 5% 250V

⊣▭⊢

3951	4822 116 52211	150Ω 5% 0.5W
3952	4822 116 52211	150Ω 5% 0.5W
3953▲	4822 116 52269	3k3 5% 0.5W
3954▲	4822 116 52269	3k3 5% 0.5W
3955	4822 051 20334	330k 5% 0.1W
3956	4822 051 20334	330k 5% 0.1W
3957	4822 051 20334	330k 5% 0.1W
3958	4822 051 20334	330k 5% 0.1W
3959	4822 051 20332	3k3 5% 0.1W
3960	4822 051 20332	3k3 5% 0.1W
3961	4822 051 20683	68k 5% 0.1W
3962	4822 051 20683	68k 5% 0.1W
3963	4822 051 20104	100k 5% 0.1W
3964	4822 051 20332	3k3 5% 0.1W
3965	4822 051 20104	100k 5% 0.1W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

3966	4822 051 20332	3k3 5% 0.1W
3967	4822 051 20104	100k 5% 0.1W
3968	4822 051 20104	100k 5% 0.1W
3969	4822 051 20683	68k 5% 0.1W
3970	4822 051 20683	68k 5% 0.1W
3971	4822 051 20153	15k 5% 0.1W
3972▲	4822 116 52233	10k 5% 0.5W
3973	4822 051 20222	2k2 5% 0.1W
3974	4822 116 80173	10k 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 050 11002	1k 1% 0.4W
3977	4822 116 52175	100Ω 5% 0.5W
3978	4822 116 52201	75Ω 5% 0.5W
3979	4822 116 52175	100Ω 5% 0.5W
3980	4822 051 20221	220Ω 5% 0.1W
3981	4822 051 20471	470Ω 5% 0.1W
3982	4822 051 20101	100Ω 5% 0.1W
3983	4822 051 20471	470Ω 5% 0.1W
3985▲	4822 116 52256	2k2 5% 0.5W
3986	4822 116 52296	6k8 5% 0.5W
3987	4822 116 80175	4k7 5% 0.5W
3988	4822 051 20182	1k8 5% 0.1W
3989	4822 051 20182	1k8 5% 0.1W
3990	4822 116 52175	100Ω 5% 0.5W
3991	4822 116 52211	150Ω 5% 0.5W
3992	4822 116 52211	150Ω 5% 0.5W

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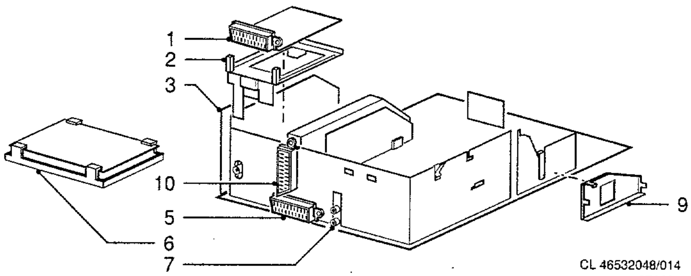
5950	4822 157 53634	5.6μH 10%

→|

6950	4822 130 80446	LL4148

7950	5322 209 10576	HEF4053BP
7951	5322 130 42136	BC848C
7952	5322 130 42136	BC848C
7953	5322 130 42136	BC848C
7954	5322 130 42136	BC848C
7975	5322 130 42136	BC848C
7976	5322 130 42136	BC848C
7977	4822 130 42513	BC858C
7978	4822 130 42513	BC858C
7979	5322 130 42136	BC848C



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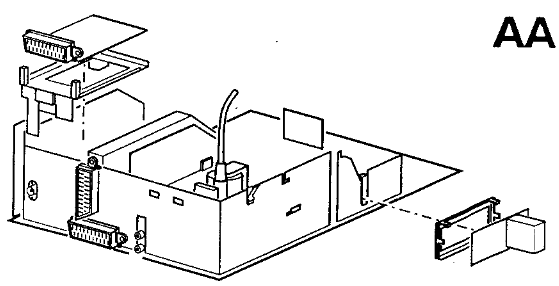
Mechanical parts list

1	4822 267 60366	Third scart euroconnector
2	4822 404 31322	3rd scart holder
3	Not applicable	
5	4822 267 60243	Euroconnector
6	4822 403 70926	Sep. mains holder
7	4822 267 30631	2 Fold cinch
9	4822 404 31317	Mains filter bracket
10	4822 267 60243	Euroconnector

Farbfernsehenempfänger Chassis

Service
Service
Service

GR 2.4
AA



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Service Manual

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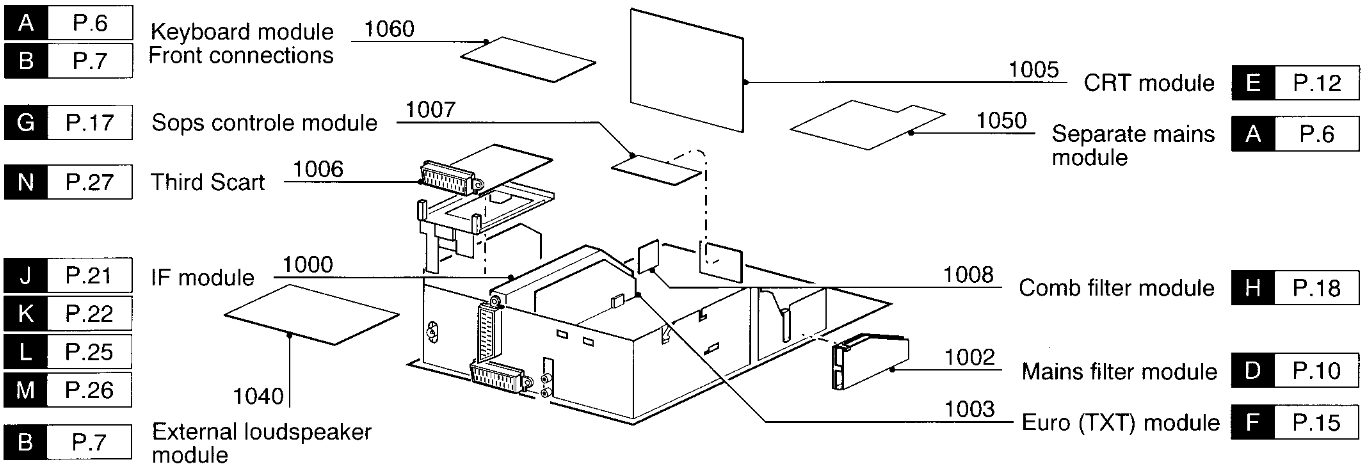
PCS 74 232 D

PHILIPS

PWB location drawing


A P.6
B P.7
Keyboard module 1060
Front connections
G P.17
Sops controle module 1007
N P.27
Third Scart 1006
J P.21
K P.22
L P.25
M P.26
IF module 1000
1040
B P.7
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3. Sicherheitsanweisungen, Wartungsanweisungen, Warnhinweise und Anmerkungen

Sicherheitsanweisungen für Reparaturen

1. Sicherheitsvorschriften erfordern, daß während einer Reparatur:
   - das Gerät über einen Trenntransformator mit der Netzspannung verbunden ist;
   - die mit dem Symbol ⚠ gekennzeichneten Sicherheitsbauelemente durch Bauelemente ersetzt werden müssen, die mit den Originalteilen identisch sind;
   - beim Austausch einer Bildröhre eine Schutzbrille getragen werden muß.

2. Sicherheitsvorschriften erfordern auch, daß nach einer Reparatur:
   - das Gerät in seinen ursprünglichen Zustand zurückgebracht werden muß;
   - das Gehäuse auf Beschädigungen hin überprüft werden muß, um eine Berührung durch der Kunde der innenliegenden Teile zu vermeiden;
   - die Isolierung des Netzkabels auf äußere Beschädigung hin überprüft werden muß;
   - die Zugentlastung des Netzkabels auf ihre Funktion überprüft werden muß;
   - Die Kabelbäume und das Hochspannungskabel korrekt verlegt sind und mit den Kabelklemmen fixiert sind, damit sie nicht die Bildröhre, heiße Bauelemente oder Kühlkörper berühren;
   - der elektrische Widerstand zwischen dem Netzstecker und der Sekundärseite geprüft wird. Diese Prüfung kann folgendermaßen durchgeführt werden:
     - Den Netzstecker aus der Steckdose herausziehen und die beiden Stifte des Netzsteckers mit einem Draht verbinden.
     - Das Fernsehgerät mit dem Netzschalter einschalten.
     - Den Widerstandswert zwischen den Stiften des Netzsteckers und der Metallabschirmung des Tuners oder dem Antennenanschluß am Gerät messen. Der Wert muß zwischen 4,5 MΩ und 12 MΩ liegen.
     - Das Fernsehgerät ausschalten und den Draht zwischen den beiden Stiften des Netzsteckers entfernen.
   - Thermisch belastete Lötverbindungen müssen nachgelötet werden. Hierzu gehören Bauelemente wie der LOT (line output transistor, der Zeilenendstufen-Transistor) und der Rücklauf-Kondensator.

Wartungsanweisungen

Es wird empfohlen, regelmäßig eine Wartungsinspektion von einen qualifizierten Servicetechniker durchzuführen. Die Wartungsintervalle hängen von den Betriebsbedingungen ab.

- Wenn das Gerät in einem Wohnzimmer benutzt wird, sollte es alle 3 bis 5 Jahre überprüft werden. Wird das Gerät zum Beispiel in der Küche oder in anderen Feuchraumen benutzt, beträgt das Wartungsintervall 1 Jahr.
- Während der Wartungsinspektion sind die obengenannten Sicherheitsüberprüfungen nach einer Reparatur durchzuführen. Das Netzteil und die Ablenkungsendstufen am Chassis, die Bildröhren-Leiterplatte und der Hogspannungsanschluß der Bildröhre müssen gereinigt werden.

Warnungen

1. Um Beschädigungen von ICs und Transistoren zu vermeiden, müssen Hochspannungsüberschläge verhindert werden. Um eine Beschädigung der Bildröhre zu vermeimeiden, muß die Bildröhre entsprechend dem in Abb. 3.1 dargestellten Verfahren entladen werden. Benutzen Sie einen Hochspannungstaster und ein universelles Multimeter (Einstellung DC-V). Die Bildröhre muß solange entladen werden, bis das Meßgerät 0 V anzeigt (nach ca. 30 s).

2. **ESD**
   Alle ICs und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD). Werden sie während der Reparatur nicht sorgfältig behandelt, kann ihre Lebensdauer erheblich verkürzt werden. Sorgen Sie dafür, daß Sie während der Reparatur über ein Handgelenkband mit Widerstand einen Potential-ausgleich schaffen (verb2inden Sie die Leitung des Handgelenkbandes mit einem Punkt, der das gleiche Potential aufweist wie die Gerätemasse). Bauteile und Hilfsmittel müssen ebenfalls auf diesem Potential gehalten werden.

3. Vorsicht bei Messungen im Hochspannungsteil sowie an der Bildröhre.

4. Module oder andere Bauteile niemals bei eingeschaltetem Gerät auswechseln.

5. Für Abgleicharbeiten Kunststoff- anstelle von Metallwerkzeugen benutzens Dadurch werden mögliche Kurzschlüsse oder Instabilität bestimmter Schaltungen vermieden.

6. Um Meßfehler zu vermeiden, dürfen die Kühlbleche nicht als Referenzpunkt für Messungen verwendet werden.
   Das Kühlblech für den Tonsignal-Endverstärker (neben dem Kanalwähler) ist mit -16 V oder -12 V verbunden.

7. Die verwendeten Flat Square Bildröhre bildet zusammen men mit der Ablenkeinheit und der eventuell vorhandenen en Multipoleinheit ein Ganzes. Die Ablenk- und die Multipoleinheit wurden im Werk optimal eingestellt und sollten daher bei Reparaturen nicht nachgeregelt werden.

8. Bei 21"-Geräten ist das Hochspannungskabel in den Zeilentransformator geklebt und kann daher nicht ersetzt werden.

Anmerkungen

1. Die Leiterplatte der Bildröhre enthält gedruckte Funkenbrücken. Alle Funkenbrücken liegen zwischen einer Elektrode der Bildröhre und der Graphitschicht.

2. Black-Line-Geräte sind an dem dicken, abgeschirmten Hochspannungskabel zu erkennen, denn alle anderen Fernsehgeräte sind mit einem dünneren, nicht abgeschirmten Hochspannungskabel versehen.

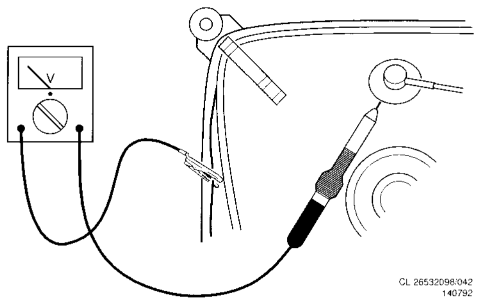


Abb. 3.1

4. Elektrische Abgleicharbeiten

1. Das Abnehmen der Rückwand

Die Rückwand kann erst abgenommen werden, wenn die Schrauben an der Oberseite, der Seitenfläche, ggf. an der Unterseite **und eventuell oben dem EXT2-Anschluß entfernt wurden.**
Bei Subwoofer-Geräten muß auch der Anschluß der Subwoofer-Box auf der entsprechenden Leiterplatte gelöst werden (siehe Abb. 4.2a).

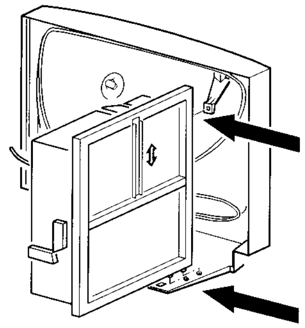
2. Service-Position 1

Service-Postion für das Messen von Testpunkten
Die Kabel von der Entmagnetisierungsspule und ggf. vom PIP-Modul lösen und das Chassis entriegeln. Das Chassis so weit nach hinten ziehen, daß alle Meßpunkte zugänglich sind (siehe Abb. 4.2b).
Um den Tuner und das ZF/Tonmodul zugänglich zu machen, kann der Bügel über diesen Modulen entfernt werden (siehe Abb. 4.3). Das Gerät funktioniert bis auf eine Fehlermeldung auch bei nicht angeschlossenem PIP-Modul normal.

3. Service-Position 2

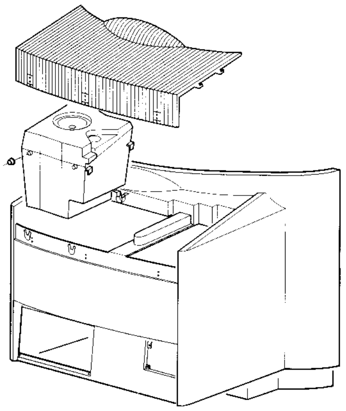
Service-Position für Reparaturen
Das Chassis auf das Kühlblech an der Tunerseite stellen, wenn Service-Position 1 erreicht ist (siehe Abb. 4.4).
Oder, falls es sich um ein FL4 Gerät handelt, dann hat es einen Service-Haken, an dem das Chassis mit Klammer aufgehängt werden kann (siehe Abb. 4.1).
Vorsicht bei der Verdrahtung !

Achtung: Das Kühlblech des Tonsignal-Endverstärkers darf keinen Kurzschluß mit dem Raster/Zeilen-Kühlblech machen, wenn der Bügel des "Third Scart" entfernt ist !



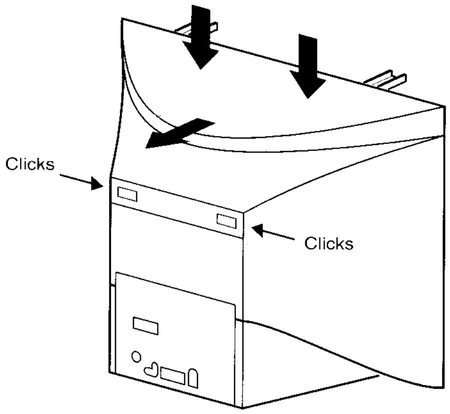
CL 46532048/019
270694

Abb. 4.1



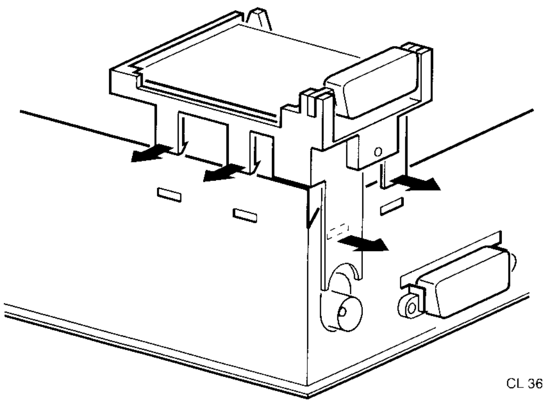
46532048/017
290694

Abb. 4.2a



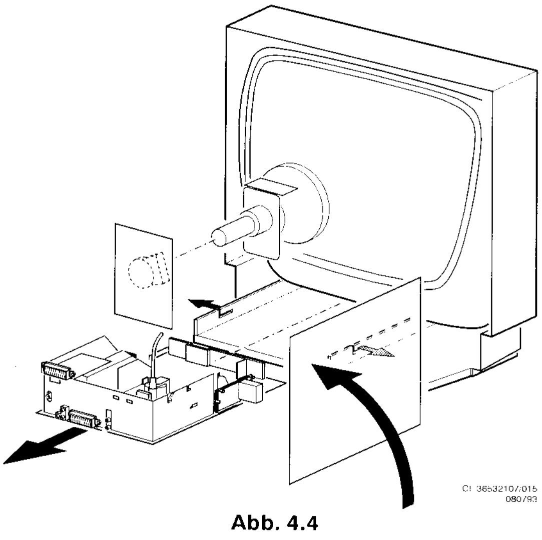
CL 36532107/018
191094

Abb. 4.2b



CL 36532107/014
290693

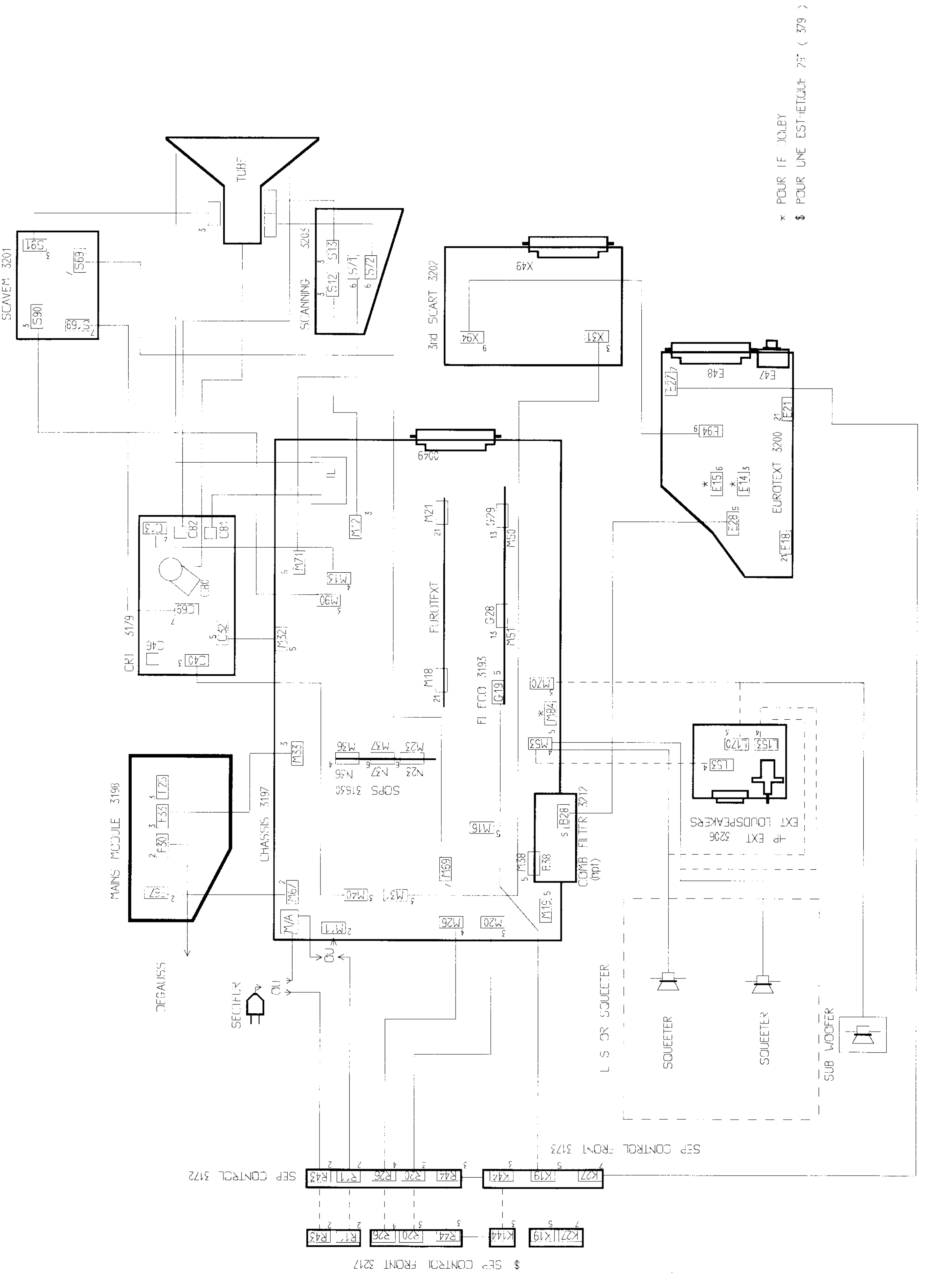
Abb. 4.3



CL 36532107/015
080793

Abb. 4.4

Wiring diagram/Verdrahtungsschema/Schéma de câblage



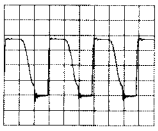
* POUR LE DOLBY
$ POUR UNE EST-IETQUE 297 (379)
TUBE
SCAVEM 3201
S91
S69
S90
S79
SCANNING 3203
S13
S12
S71
S72
3rd SCART 3202
X49
X94
X31
EUROTEXT 3200
E48
E47
E27
E21
E94
E15
E14
E28
E18
CHASSIS 3197
0049
IL
M12
M21
EUROTEXT
M18
G29
M30
G28
M51
FILECO 3193
G19
M70
M84
M53
CRT 3179
C73
C82
C81
C80
C69
C32
C46
C40
M71
M15
M90
M32
M33
M36
M37
M23
N36
N37
N23
SOPS 31650
MAINS MODULE 3198
F25
F33
F30
F67
M67
M/A
M11
M26
M20
M40
M31
M39
M16
M38
R38
COMB FILTER 3212 (npt)
B28
M19
L53
L170
L153
EXT LOUDSPEAKERS
HP EXT 3206
DEGAUSS
SECTEUR
OU
OU
OU
L.S OR SQUEETER
SQUEETER
SQUEETER
SUB WOOFER
SEP CONTROL FRONT 3173
SEP CONTROL 3172
R43
R11
R26
R20
R44
K44
K19
K27
$ SEP CONTROL FRONT 3217

Oscillograms/Oszillogramme/Oscillogrammes

TP1 = DC 15V9

TP2 = DC -15V9

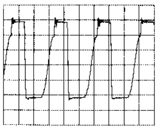
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

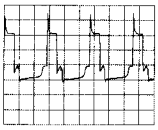


5V/div AC
5µs div

TP6 = DC 4V8

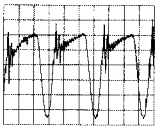
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



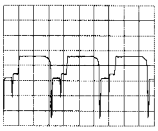
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

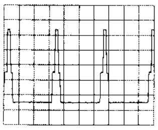
TP12 = DC 2V7

TP14



2V/div AC
20µs div

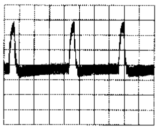
TP16



2V/div AC
20µs div

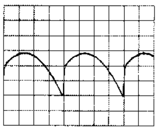
TP17 = DC 0V

TP18



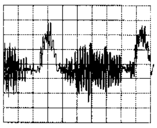
2V/div AC
5ms div

TP19



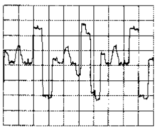
1V/div AC
5ms div

TP20



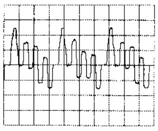
20mV/div AC
10µs div

TP21



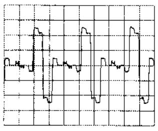
0.1V/div AC
20µs div

TP22



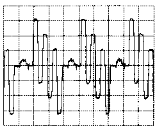
0.2V/div AC
20µs div

TP23



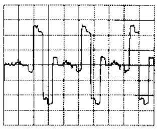
0.2V/div AC
20µs div

TP24



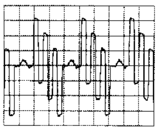
0.2V/div AC
20µs div

TP25



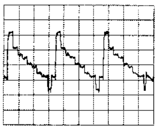
0.2V/div AC
20µs div

TP26



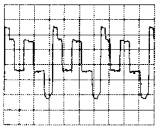
0.2V/div AC
20µs div

TP27



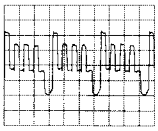
0.1V/div AC
20µs div

TP28



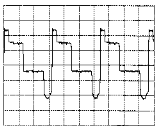
0.5V/div AC
20µs div

TP29



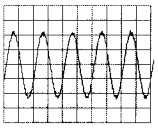
0.5V/div AC
20µs div

TP30



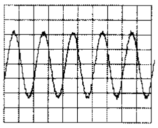
0.5V/div AC
20µs div

TP31



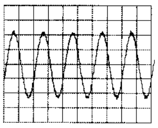
10mV/div AC
0.5ms div

TP32



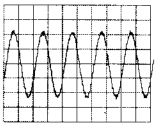
10mV/div AC
0.5ms div

TP33



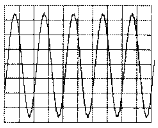
10mV/div AC
0.5ms div

TP34



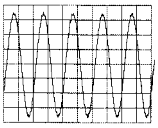
10mV/div AC
0.5ms div

TP35



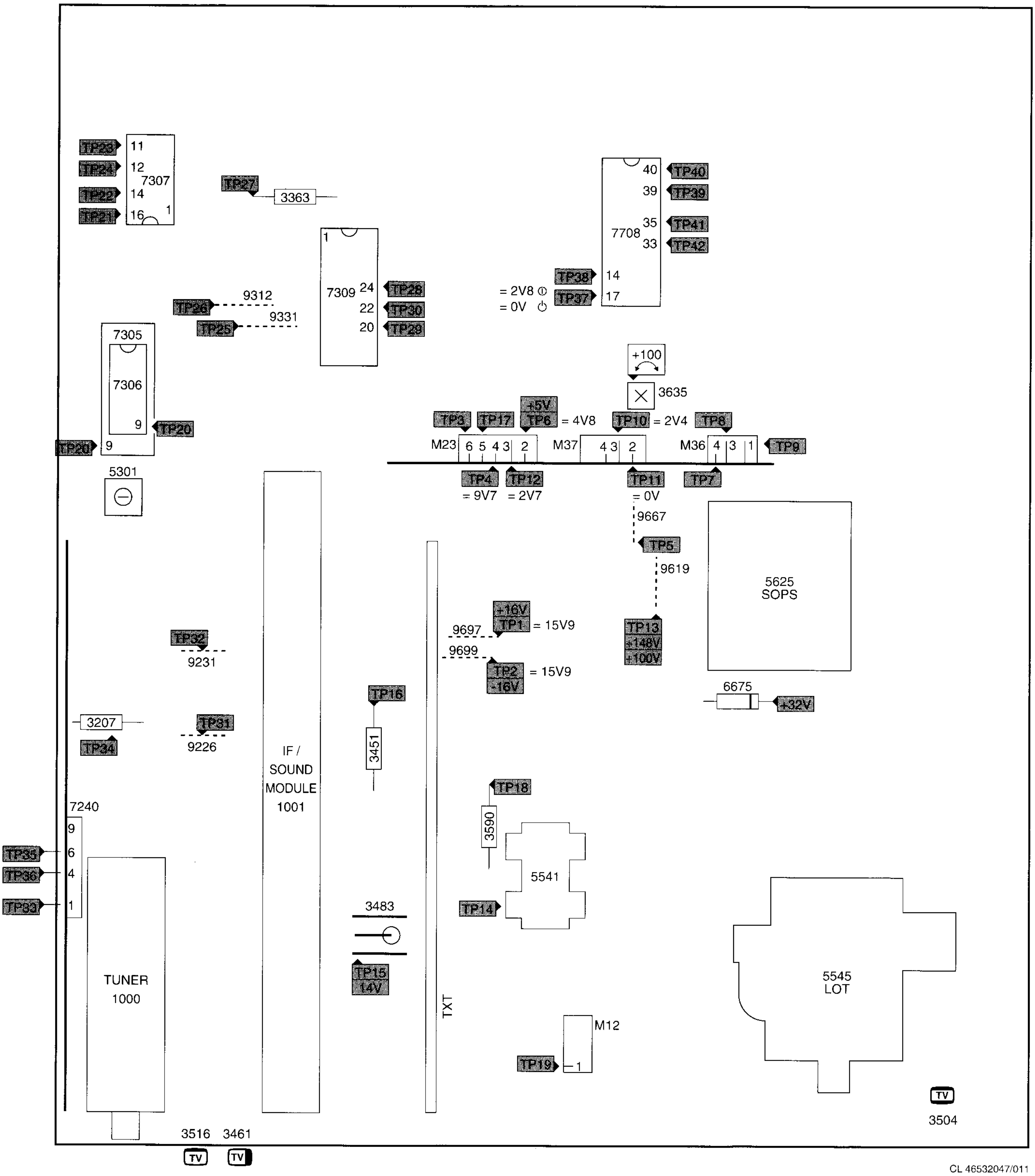
200mV/div AC
0.5ms div

TP36



200mV/div AC
0.5ms div

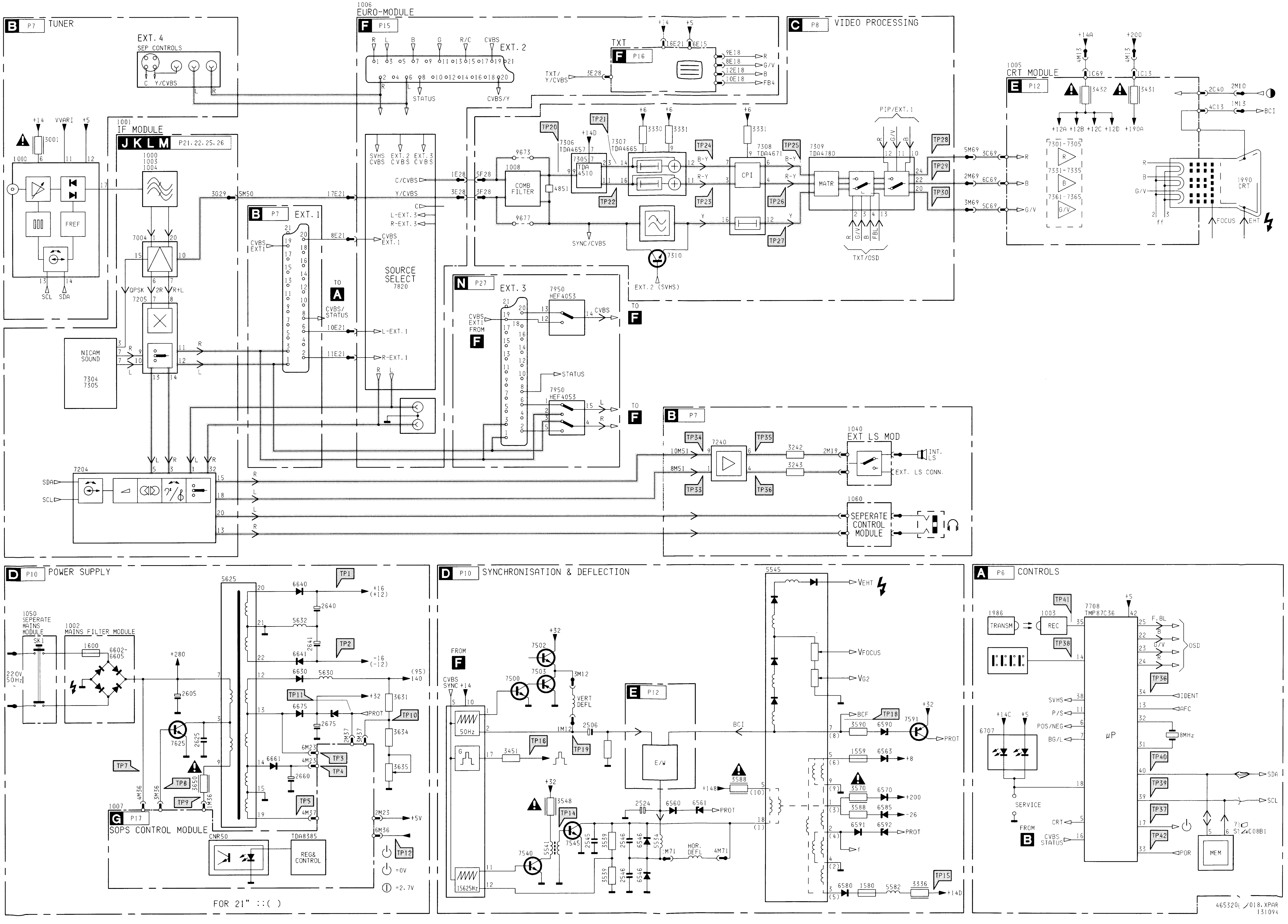
Test point overview/Übersicht Teststellen/Tableau des points à tester


TP23
TP24
TP22
TP21
11
12
14
16
1
7307
TP27
3363
7309
1
24
22
20
TP28
TP30
TP29
9312
9331
TP26
TP25
7305
7306
9
TP20
TP20
9
5301
7708
40
39
35
33
14
17
TP40
TP39
TP41
TP42
TP38
TP37
= 2V8 ①
= 0V ⏻
+100
3635
TP3
TP17
+5V
TP6
= 4V8
TP10
= 2V4
TP8
M23
6 5 4 3 2
M37
4 3 2
M36
4 3 1
TP9
TP4
TP12
= 9V7
= 2V7
TP11
= 0V
9667
TP5
9619
TP7
5625
SOPS
+16V
TP1
= 15V9
9697
9699
TP2
-16V
= 15V9
TP13
+148V
+100V
6675
+32V
TP32
9231
TP31
9226
3207
TP34
TP16
3451
IF /
SOUND
MODULE
1001
TP18
3590
5541
TP14
7240
9
6
4
1
TP35
TP36
TP33
TUNER
1000
3483
TP15
14V
TXT
M12
TP19
1
5545
LOT
TV
3504
3516
3461
TV
TV

CL 46532047/011
181094

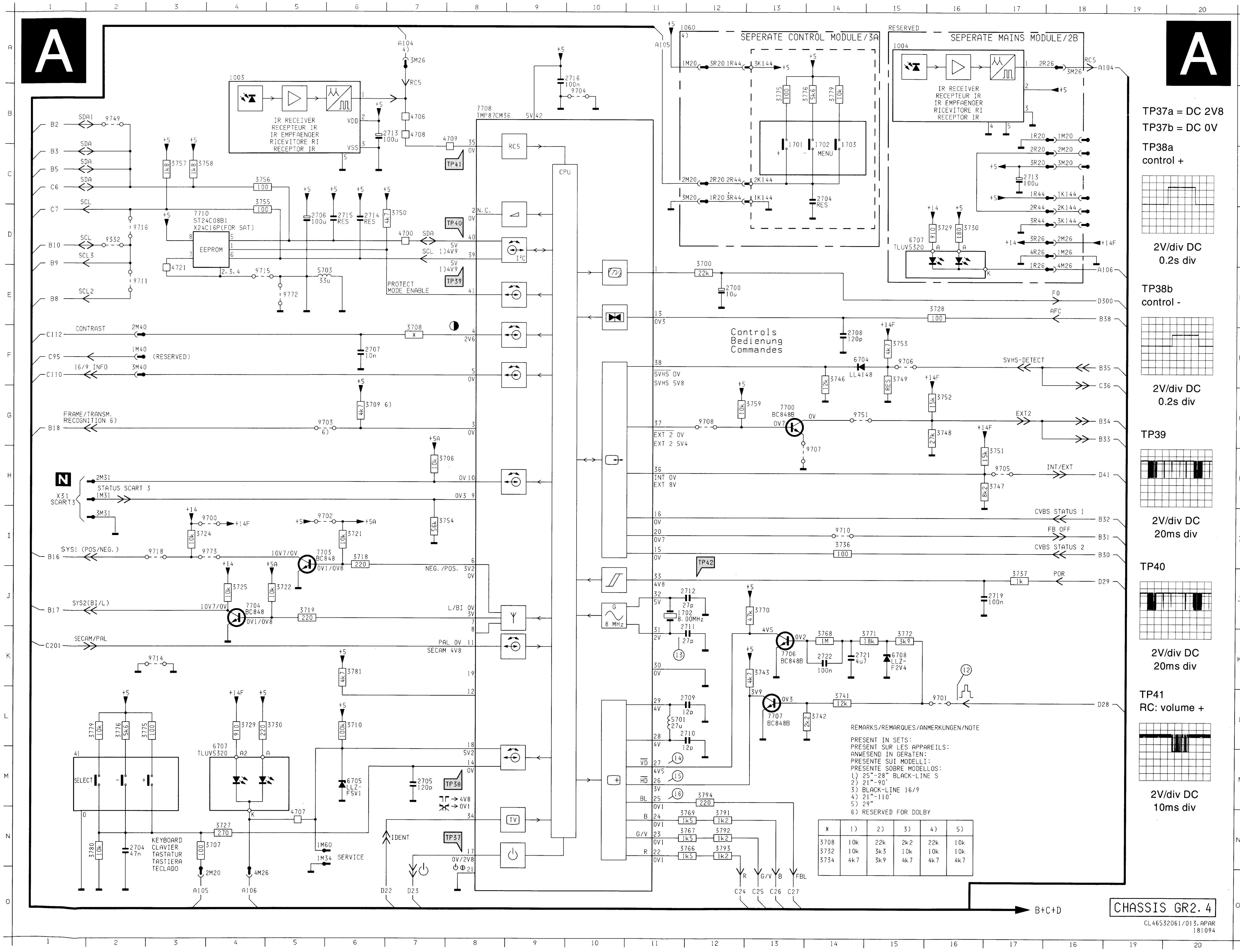
Block diagram/Blockschaltbild/Schéma-bloc

CHASSIS GR 2.4 **5**



B P7 TUNER
EXT. 4
SEP. CONTROLS
C Y/CVBS
1006
EURO-MODULE
F P15
EXT. 2
STATUS
CVBS/Y
TXT
F P16
TXT/ Y/CVBS
C P8 VIDEO PROCESSING
1001
IF MODULE
J K L M P21, 22, 25, 26
1000 1003 1004
7004
7205
QPSK
NICAM SOUND
7304 7305
B P7 EXT. 1
CVBS EXT1
TO A
CVBS/ STATUS
L-EXT. 1
R-EXT. 1
SOURCE SELECT 7820
SVHS CVBS
EXT. 2 CVBS
EXT. 3 CVBS
C/CVBS
Y/CVBS
L-EXT. 3
R-EXT. 3
1008
COMB FILTER
7306 TDA4657
7305 TDA 4510
7307 TDA4665
7308 TDA4671
7309 TDA4780
CPI
MATR
PIP/EXT. 1
TXT/OSD
SYNC/CVBS
7310
EXT. 2 (SVHS)
N P27 EXT. 3
CVBS EXT1 FROM F
7950 HEF4053
TO F
TP20 TP21 TP22 TP23 TP24 TP25 TP26 TP27 TP28 TP29 TP30
1005
CRT MODULE
E P12
7301-7305
7331-7335
7361-7365
1990 CRT
FOCUS
EHT
7204
SDA
SCL
B P7
1040
EXT LS MOD
7240
INT. LS
EXT. LS CONN.
TP33 TP34 TP35 TP36
1060
SEPERATE CONTROL MODULE
D P10 POWER SUPPLY
1050 SEPERATE MAINS MODULE
1002 MAINS FILTER MODULE
220V 50Hz
5625
+280
+16 (+12)
-16 (-12)
(95) 140
+32
PROT
+5V
7625
1007
G P17
SOPS CONTROL MODULE
CNR50
TDA8385
REG& CONTROL
=0V
=2.7V
FOR 21" ::( )
TP1 TP2 TP3 TP4 TP5 TP7 TP8 TP9 TP10 TP11 TP12
D P10 SYNCHRONISATION & DEFLECTION
FROM F
CVBS SYNC +14
50Hz
15625Hz
7500 7502 7503
VERT DEFL
E P12
E/W
BCI
HOR. DEFL
7540 7545
5545
VEHT
VFOCUS
VG2
BCF
7591
PROT
+8
+200
-26
+14D
TP14 TP15 TP16 TP18 TP19
A P6 CONTROLS
1986 TRANSM
1003 REC
7708 TMP87C36
µP
OSD
F.BL
IDENT
AFC
SVHS
P/S
POS/NEG
BG/L
8MHz
6707
SERVICE
FROM B
CVBS STATUS
CRT
SDA
SCL
POR
MEM
TP36 TP37 TP38 TP39 TP40 TP41 TP42
4653201/018.XPAR 131094

Controls/Bedienung/Commandes


A
SEPERATE CONTROL MODULE/3A
SEPERATE MAINS MODULE/2B
RESERVED
IR RECEIVER RECEPTEUR IR IR EMPFAENGER RICEVITORE RI RECEPTOR IR
7708 IMP87CM36
CPU
7710 ST24C08B1 X24C16P(FOR SAT)
EEPROM
PROTECT MODE ENABLE
CONTRAST
(RESERVED)
16/9 INFO
FRAME/TRANSM. RECOGNITION 6)
STATUS SCART 3
X31 SCART3
SYS1 (POS/NEG.)
SYS2(BI/L)
SECAM/PAL
NEG./POS.
L/BI
PAL 0V SECAM 4V8
KEYBOARD CLAVIER TASTATUR TASTIERA TECLADO
SELECT
SERVICE
IDENT
Controls Bedienung Commandes
SVHS-DETECT
EXT2
INT/EXT
CVBS STATUS 1
FB OFF
CVBS STATUS 2
POR
AFC
8 MHz
B+C+D
TP37a = DC 2V8
TP37b = DC 0V
TP38a control +
2V/div DC 0.2s div
TP38b control -
2V/div DC 0.2s div
TP39
2V/div DC 20ms div
TP40
2V/div DC 20ms div
TP41 RC: volume +
2V/div DC 10ms div
CHASSIS GR2.4
CL46532061/013.APAR 181094

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) BLACK-LINE 16/9
4) 21"-110˚
5) 29"
6) RESERVED FOR DOLBY

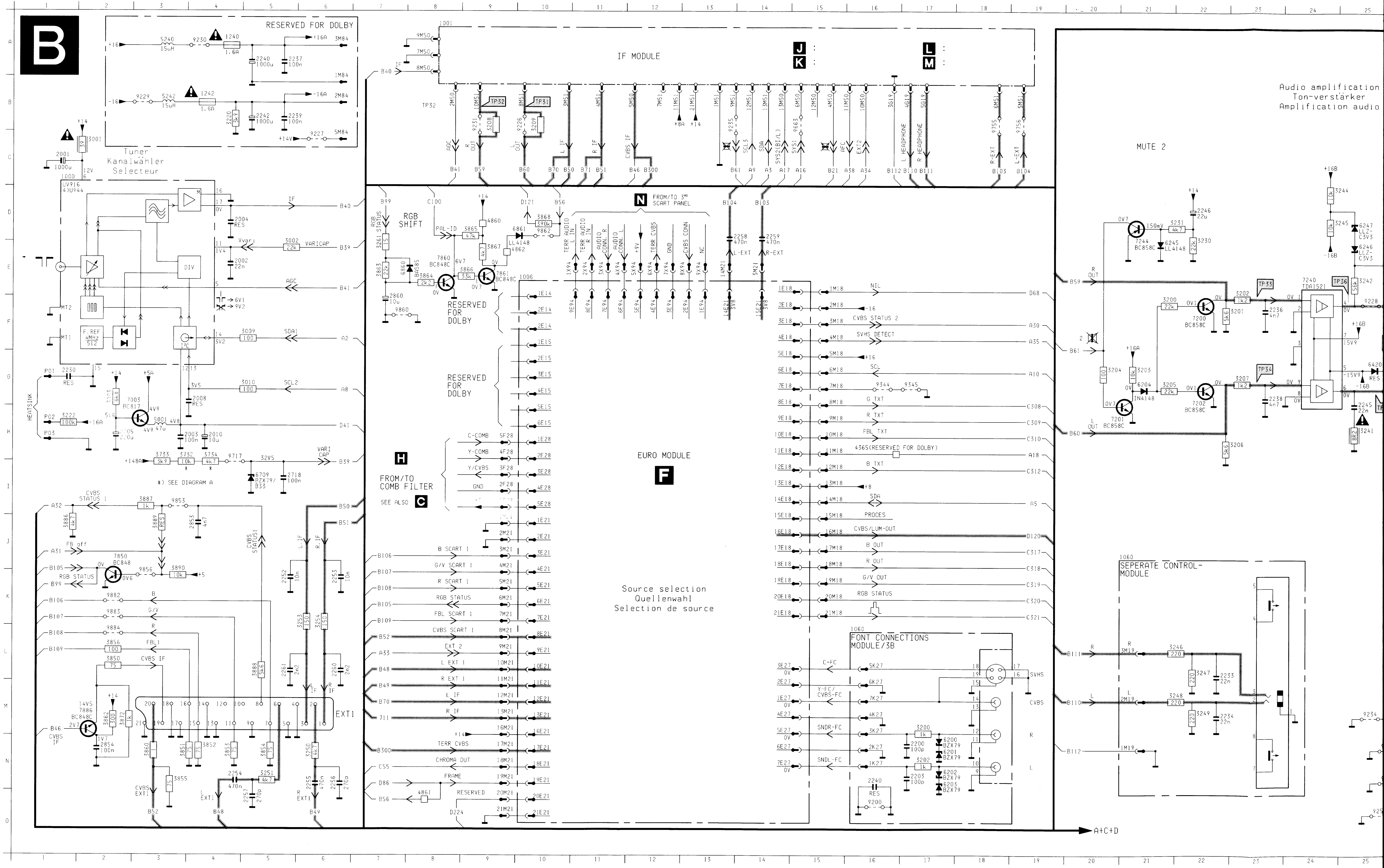
*	1)	2)	3)	4)	5)
3708	10k	22k	2k2	22k	10k
3732	10k	3k3	10k	10k	10k
3734	4k7	3k9	4k7	4k7	4k7

1003	A 4
1004	A15
1060	A11
1701	B13
1702	B14
1702	J11
1703	B14
2700	E12
2704	C14
2704	N 2
2705	M 7
2706	D 5
2707	F 6
2708	F14
2709	L12
2710	L12
2711	K12
2712	J12
2713	B 6
2713	C17
2714	D 6
2715	D 6
2716	A 9
2719	J17
2721	K14
2722	K14
3700	E12
3706	H 7
3707	N 3
3708	F 7
3709	G 6
3710	L 6
3718	I 6
3719	J 5
3721	I 6
3722	J 5
3724	I 3
3725	J 4
3727	N 4
3728	E16
3729	D16
3729	L 4
3730	D16
3730	L 5
3736	I14
3737	J17
3741	L14
3742	L14
3743	K13
3746	F14
3747	H17
3748	G16
3749	F15
3749	F15
3750	D 7
3751	H17
3752	G16
3753	F15
3754	I 7
3755	D 4
3756	C 4
3757	C 3
3758	C 3
3759	G13
3766	N12
3767	N12
3768	K14
3769	N12
3770	J13
3771	K15
3772	K15
3775	B13
3775	L 3
3776	B14
3776	L 2
3779	B14
3779	L 2
3780	N 2
3781	K 6
3791	N12
3792	N12
3793	N12
3794	M12
41	M 1
4700	D 7
4706	B 7
4707	N 5
4708	B 7
4709	B 8
4721	E 3
5701	L11
5703	E 5
6704	F14
6705	M 6
6707	D15
6707	M 4
6708	K15
7700	G13
7703	I 5
7704	J 4
7706	K13
7707	L13
7708	B 8
7710	D 3
9332	D 2
9700	I 4
9701	L16
9702	I 5
9703	G 5
9704	B10
9705	H17
9706	F15
9707	H14
9708	G12
9710	I14
9711	E 2
9714	K 3
9715	E 4
9716	D 2
9718	I 3
9749	B 2
9751	G14
9772	E 5
9773	I 4

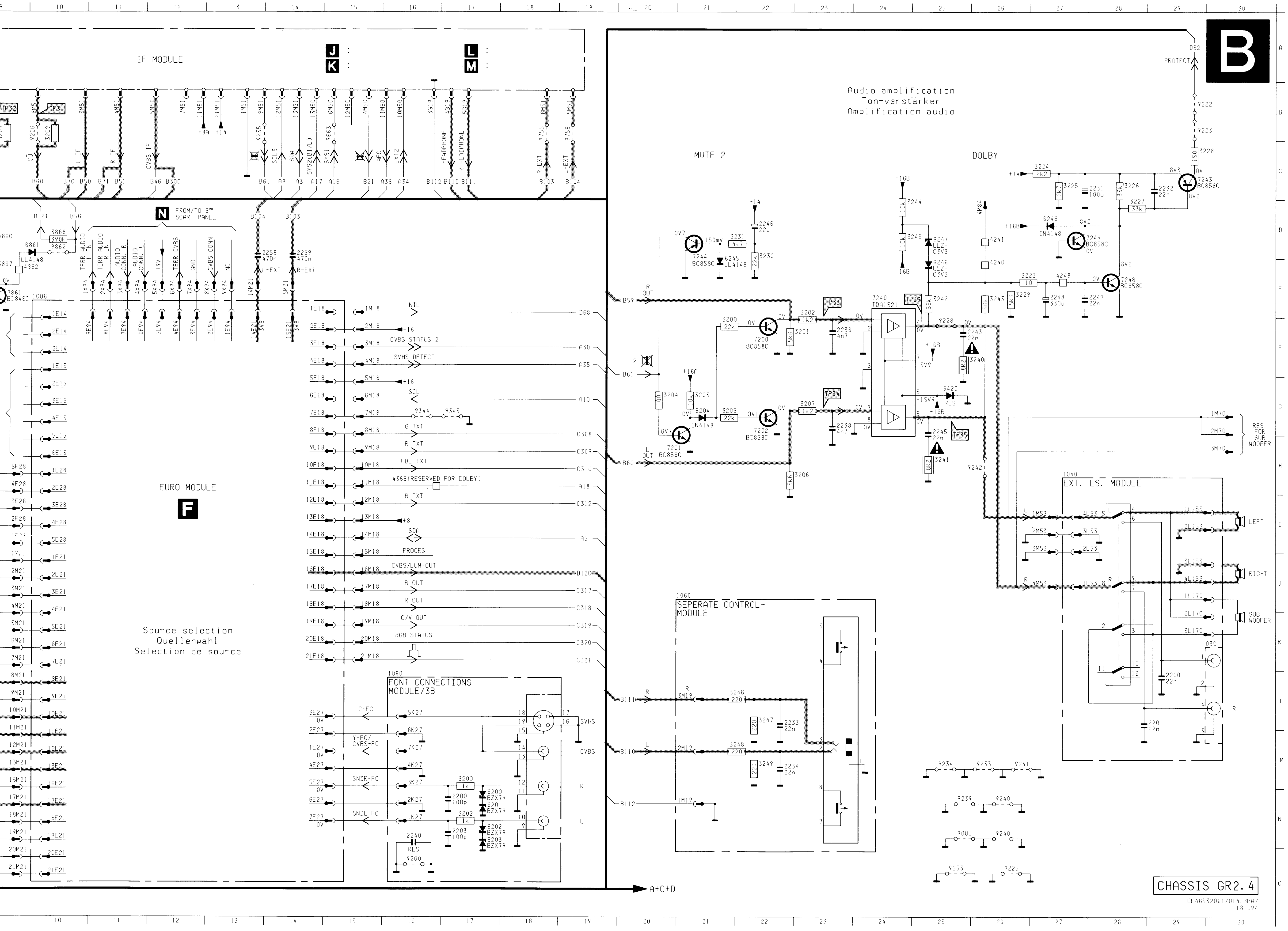
Tuner/Kanalwähler/Sélecteur

CHASSIS GR 2.4 **7**

IF/ZF/FI

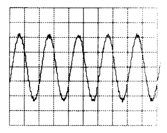

B
RESERVED FOR DOLBY
Tuner
Kanalwähler
Selecteur
UV916
41U944
IF MODULE
J
K
L
M
TP32
TP31
AGC
R OUT
L OUT
L IF
R IF
CVBS IF
SCL3
SDA
SYS2(BI/L)
SYS1
AFC
EXT2
L HEADPHONE
R HEADPHONE
R-EXT
L-EXT
RGB SHIFT
N
FROM/TO 3rd SCART PANEL
TERR AUDIO L IN
TERR AUDIO R IN
AUDIO CONN. R
AUDIO CONN. L
+9V
TERR CVBS
GND
CVBS CONN
NC
L-EXT
R-EXT
RESERVED FOR DOLBY
RESERVED FOR DOLBY
H
FROM/TO COMB FILTER
SEE ALSO C
C-COMB
Y-COMB
Y/CVBS
GND
EURO MODULE
F
Source selection
Quellenwahl
Sélection de source
NIL
CVBS STATUS 2
SVHS DETECT
SCL
G TXT
R TXT
FBL TXT
4365(RESERVED FOR DOLBY)
B TXT
SDA
PROCES
CVBS/LUM-OUT
B OUT
R OUT
G/V OUT
RGB STATUS
B SCART 1
G/V SCART 1
R SCART 1
RGB STATUS
FBL SCART 1
CVBS SCART 1
EXT 2
L EXT 1
R EXT 1
L IF
R IF
TERR CVBS
CHROMA OUT
FRAME
RESERVED
1060
FONT CONNECTIONS MODULE/3B
C-FC
Y-FC/CVBS-FC
SNDR-FC
SNDL-FC
SVHS
CVBS
R
L
CVBS STATUS 1
FB off
RGB STATUS
CVBS IF
EXT1
CVBS STATUS1
*) SEE DIAGRAM A
HEATSINK
VARICAP
VARI CAP
Audio amplification
Ton-verstärker
Amplification audio
MUTE 2
TDA1521
TP33
TP34
TP36
1060
SEPERATE CONTROL-MODULE
A+C+D

IF/ZF/FI


IF MODULE
J :
K :
L :
M :
B
PROTECT
Audio amplification
Ton-verstärker
Amplification audio
MUTE 2
DOLBY
FROM/TO 3RD SCART PANEL
N
TERR AUDIO L IN
TERR AUDIO R IN
AUDIO CONN. R
AUDIO CONN. L
+9V
TERR CVBS
GND
CVBS CONN
NC
L-EXT
R-EXT
L HEADPHONE
R HEADPHONE
SCL3
SDA
SYS2(B/L)
SYS1
AFC
EXT2
EURO MODULE
F
Source selection
Quellenwahl
Selection de source
NIL
CVBS STATUS 2
SVHS DETECT
SCL
G TXT
R TXT
FBL TXT
4365(RESERVED FOR DOLBY)
B TXT
SDA
PROCES
CVBS/LUM-OUT
B OUT
R OUT
G/V OUT
RGB STATUS
1060
FONT CONNECTIONS MODULE/3B
C-FC
Y-FC/CVBS-FC
SNDR-FC
SNDL-FC
SVHS
CVBS
R
L
RES
1060
SEPERATE CONTROL-MODULE
1040
EXT. LS. MODULE
RES. FOR SUB WOOFER
LEFT
RIGHT
SUB WOOFER
7240 TDA1521
TP31
TP32
TP33
TP34
TP35
TP36
R OUT
L OUT
A+C+D
CHASSIS GR2.4
CL46532061/014.BPAR
181094

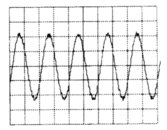
1000	C 1	3890	K 3
1001	A 8	4240	E26
1006	E10	4241	D26
1040	H27	4248	E27
1060	J20	4365	H *
1060	L16	4860	D 9
1240	A 4	4861	O 8
1242	B 4	4862	E 9
2001	C 1	5001	H 3
2002	E 4	5240	A 3
2003	H 3	5242	B 3
2004	D 4	6200	N17
2005	H 2	6201	N17
2008	G 4	6202	N17
2010	H 4	6203	N17
2200	L29	6204	G21
2200	N17	6245	E21
2201	L29	6246	E25
2203	N17	6247	D25
2230	G 1	6248	D27
2231	C28	6420	G25
2232	C29	6709	I 5
2233	L22	6860	E 7
2234	M22	6861	D10
2236	F23	7003	G 3
2237	A 5	7200	F22
2238	G23	7201	H21
2239	B 5	7202	G22
2240	A 5	7240	E24
2240	N16	7243	C29
2242	B 5	7244	D21
2243	F25	7248	E28
2245	G25	7249	D27
2246	D22	7850	J 2
2248	E27	7860	E 8
2249	E28	7861	E 9
2252	K 5	7886	M 2
2253	K 6	9001	N25
2254	N 4	9200	O16
2255	N 6	9222	B29
2256	N 6	9223	B29
2257	O 5	9225	O26
2258	D13	9226	B10
2259	D14	9227	C 6
2260	L 6	9228	F25
2261	L 5	9229	B 3
2718	I 5	9230	A 4
2853	J 4	9231	B 9
2854	N 2	9233	M26
2860	F 7	9234	M25
3001	C 2	9235	B13
3002	E 5	9239	N25
3003	G 2	9240	N26
3009	F 5	9240	N26
3010	G 5	9241	M26
3200	F21	9242	H26
3200	M17	9253	O25
3201	F23	9344	G16
3202	E23	9345	G17
3202	N17	9663	B15
3203	G21	9717	H 4
3204	G20	9755	B18
3205	G21	9756	B19
3206	H23	9853	I 3
3207	G23	9856	K 3
3208	B 9	9860	F 7
3209	B10	9862	D10
3220	B 4	9882	K 2
3222	H 1	9883	K 2
3223	E26	9884	L 2
3224	C27		
3225	C27		
3226	C28		
3227	D28		
3228	C29		
3229	E26		
3230	D22		
3231	D22		
3240	F25		
3241	H25		
3242	E25		
3243	E26		
3244	C24		
3245	D24		
3246	L22		
3247	L22		
3248	M22		
3249	M22		
3250	N 6		
3251	N 5		
3253	K 6		
3254	K 6		
3261	E 7		
3732	H 3		
3733	H 3		
3734	H 4		
3850	L 2		
3851	N 3		
3852	N 4		
3853	N 4		
3854	N 5		
3855	N 3		
3856	L 2		
3860	N 3		
3862	M 2		
3863	E 7		
3864	E 8		
3865	D 9		
3866	E 9		
3867	E 9		
3868	D10		
3872	M 2		
3886	J 1		
3887	I 3		
3888	L 5		
3889	J 3		

* TP31



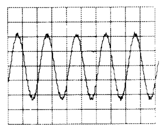
10mV/div AC
0.5ms div

* TP32



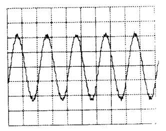
10mV/div AC
0.5ms div

* TP33



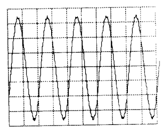
10mV/div AC
0.5ms div

* TP34



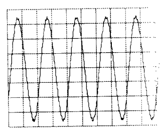
10mV/div AC
0.5ms div

* TP35



200mV/div AC
0.5ms div

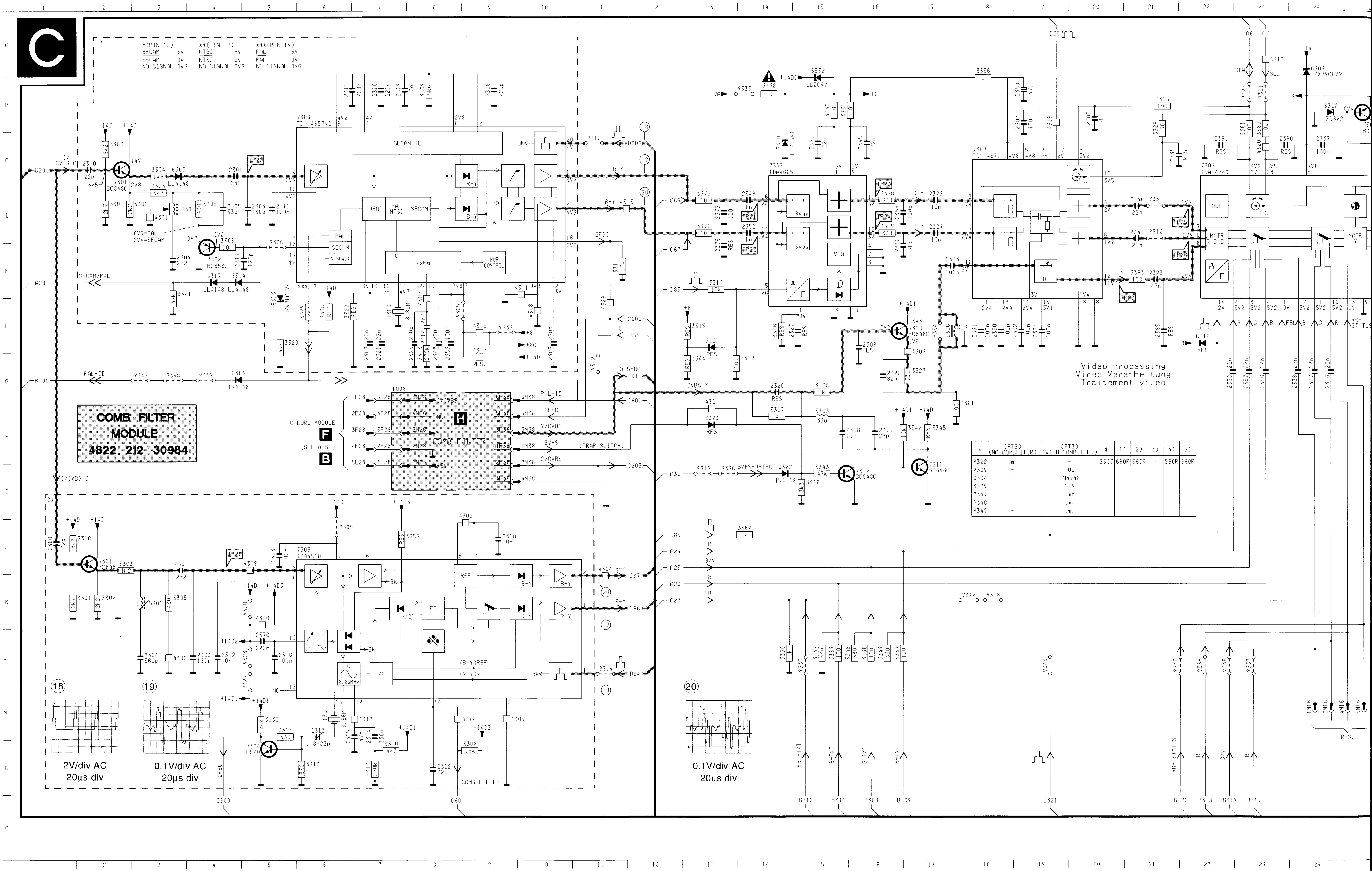
* TP36



200mV/div AC
0.5ms div

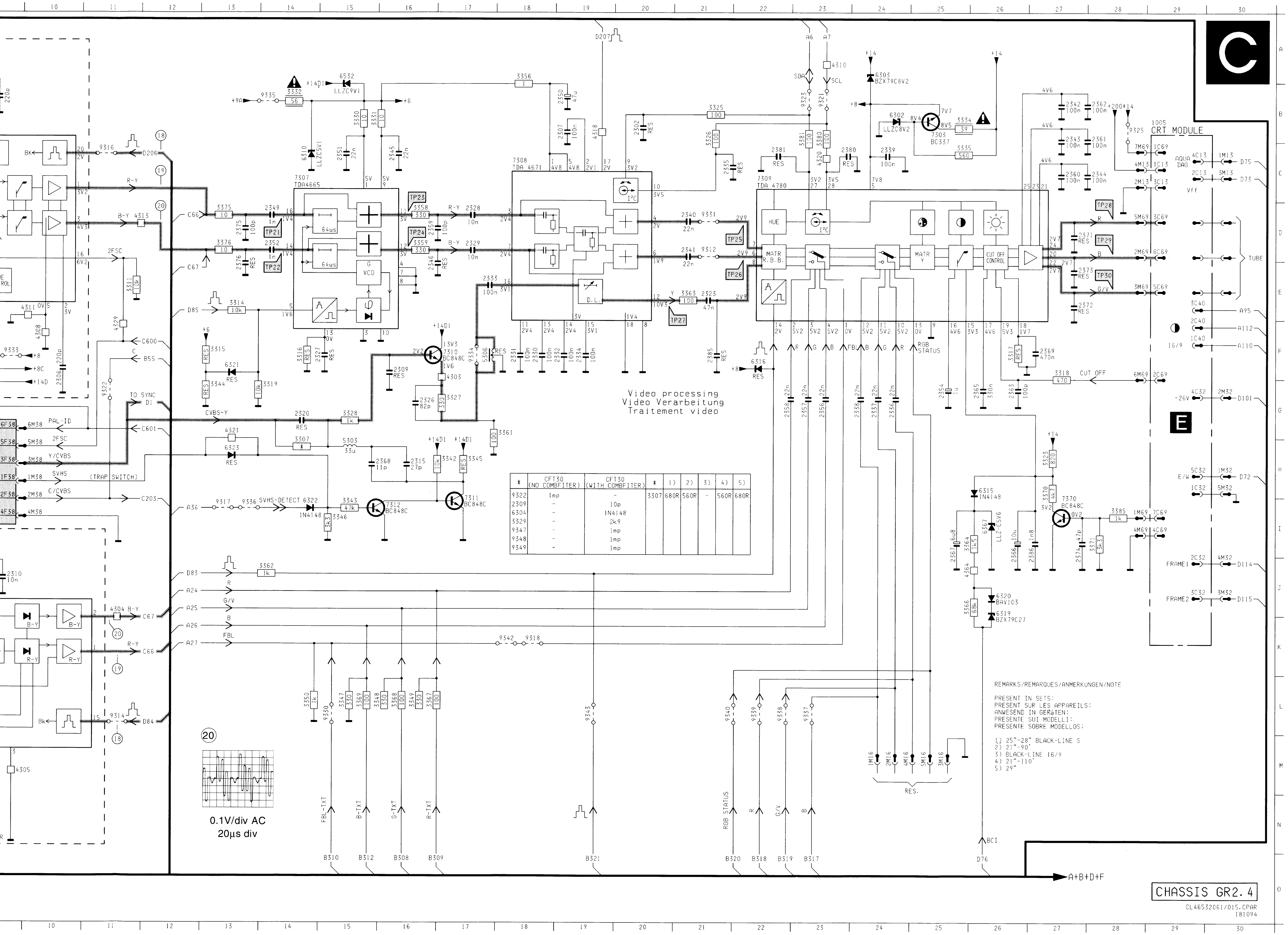
* measured at ⊿ = 50%

Video processing/Video Verarbeitung/ Traitement video


C
1)
*(PIN 18) SECAM 6V SECAM 0V NO SIGNAL 0V6
**(PIN 17) NTSC 6V NTSC 0V NO SIGNAL 0V6
***(PIN 19) PAL 6V PAL 0V NO SIGNAL 0V6
7306 TDA 4657V2
SECAM REF
IDENT
PAL NTSC
SECAM
2xFq
HUE CONTROL
PAL
SECAM
NTSC4.4
7301 BC848C
7302 BC858C
0V7=PAL
2V4=SECAM
SECAM/PAL
C/CVBS-C
TP20
R-Y
B-Y
2FSC
TO SYNC D1
PAL-ID
COMB FILTER MODULE 4822 212 30984
TO EURO-MODULE
(SEE ALSO)
F
B
H
COMB-FILTER
1008
C/CVBS
Y/CVBS
SVHS
(TRAP SWITCH)
2)
7305 TDA4510
REF
FF
H/2
(B-Y)REF
(R-Y)REF
8.86MHz
7304 BFS20
COMB-FILTER
C600
C601
18
2V/div AC
20µs div
19
0.1V/div AC
20µs div
20
0.1V/div AC
20µs div
7307 TDA4665
64us
VCO
TP21
TP22
TP23
TP24
7308 TDA 4671
D.L.
TP25
TP26
TP27
7309 TDA 4780
HUE
MATR R.B.B.
MATR Y
7310 BC848C
7311 BC848C
7312 BC848C
SVHS-DETECT
CVBS-Y
Video processing
Video Verarbeitung
Traitement video
SDA
SCL
RGB STATUS
FBL-TXT
B-TXT
G-TXT
R-TXT
RES.
B310
B312
B308
B309
B321
B320
B318
B319
B317

*	CFT30 (NO COMBFITER)	CFT30 (WITH COMBFITER)	*	1)	2)	3)	4)	5)
9322	1mp	-	3307	680R	560R	-	560R	680R
2309	-	10p						
6304	-	1N4148						
3329	-	2k9						
9347	-	1mp						
9348	-	1mp						
9349	-	1mp						

Traitement video


C
E
Video processing
Video Verarbeitung
Traitement video
7307 TDA4665
7308 TDA 4671
7309 TDA 4780
1005 CRT MODULE
TUBE
HUE
MATR R.B.B.
MATR Y
CUT OFF CONTROL
64µs
VCO
D.L.
I²C
TP21
TP22
TP23
TP24
TP25
TP26
TP27
TP28
TP29
TP30
SDA
SCL
CVBS-Y
PAL-ID
Y/CVBS
SVHS
(TRAP SWITCH)
C/CVBS
TO SYNC
SVHS-DETECT
RGB STATUS
FBL-TXT
B-TXT
G-TXT
R-TXT
AQUA DAG
Vff
FRAME1
FRAME2
E/W
RES.
A+B+D+F
7310 BC848C
7311 BC848C
7312 BC848C
7303 BC337
7370 BC848C
0.1V/div AC
20µs div
CHASSIS GR2.4
CL46532061/015.CPAR
181094

✱	CFT30 (NO COMBFITER)	CFT30 (WITH COMBFITER)	✱	1)	2)	3)	4)	5)
9322	1mp	-	3307	680R	560R	-	560R	680R
2309	-	10p						
6304	-	1N4148						
3329	-	2k9						
9347	-	1mp						
9348	-	1mp						
9349	-	1mp						

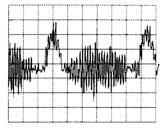
REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) 25"-28" BLACK-LINE S
2) 21"-90°
3) BLACK-LINE 16/9
4) 21"-110°
5) 29"

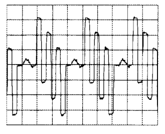
1005	B29	3319	G14	9328	L 5
1008	G 7	3320	F 5	9330	L15
1300	F 7	3321	E 3	9331	D21
1301	M 6	3322	F 6	9333	F 9
2300	C 2	3323	H27	9334	F17
2300	J 1	3324	M 5	9335	B14
2301	C 4	3325	B21	9336	I13
2301	J 3	3326	B21	9337	L23
2302	B20	3327	G17	9338	L22
2303	D 5	3328	G15	9339	L22
2303	L 4	3329	F 6	9340	L21
2304	E 3	3330	B15	9342	K18
2304	L 3	3331	B15	9343	L19
2305	D 4	3332	B14	9347	G 3
2306	B 9	3333	M 5	9348	G 3
2306	F10	3334	B25	9349	G 4
2307	B19	3335	C25		
2308	F 7	3342	H17		
2309	F16	3343	I15		
2310	B 7	3344	G13		
2310	J 9	3345	H17		
2311	D 5	3346	I15		
2312	B 6	3347	L15		
2312	L 4	3348	L16		
2313	M 6	3349	L16		
2314	F 8	3350	L14		
2314	M 7	3355	J 7		
2315	H16	3356	A18		
2316	L 5	3358	D16		
2317	E 4	3359	D16		
2319	B 7	3361	G18		
2320	G14	3362	J14		
2321	F 7	3363	E21		
2322	N 8	3364	I26		
2323	E21	3366	J26		
2325	F 8	3367	L16		
2325	M 6	3368	L16		
2326	G16	3369	L15		
2327	F15	3370	H27		
2328	D17	3371	I28		
2329	D17	3375	D13		
2330	F18	3376	D13		
2331	F18	3380	B23		
2332	F19	3381	B23		
2333	E17	3385	I28		
2334	F19	4301	D 3		
2335	C21	4302	L 3		
2336	G24	4303	F17		
2337	G24	4304	J11		
2338	G24	4305	M 9		
2339	C24	4306	I 9		
2340	D21	4307	F 8		
2341	D21	4308	F10		
2342	B27	4309	J 5		
2343	B27	4310	A23		
2344	C28	4311	E10		
2345	C16	4312	M 7		
2346	E16	4313	D11		
2348	F 8	4314	M 8		
2349	D14	4316	F 9		
2350	B19	4317	F 9		
2351	C15	4318	B19		
2352	D14	4320	C23		
2353	F 8	4321	G13		
2353	J 5	4329	F11		
2354	G25	4330	K 5		
2356	G23	4364	J26		
2357	G23	5301	D 3		
2358	G22	5301	K 3		
2359	D16	5303	H15		
2360	C27	5306	F17		
2361	B28	6300	C 3		
2362	B28	6302	B24		
2363	G26	6303	A24		
2365	G26	6304	G 4		
2366	I26	6310	C14		
2367	I25	6313	F 5		
2368	H15	6314	E 4		
2369	F27	6315	H26		
2370	L 5	6316	F22		
2371	D27	6317	E 4		
2372	E27	6319	J26		
2373	E27	6320	J26		
2374	I27	6321	F13		
2375	D13	6322	I14		
2376	E13	6323	H13		
2380	C23	6367	I26		
2381	C22	6532	A15		
2385	F21	7301	C 2		
2386	I27	7301	J 2		
3300	C 2	7302	E 4		
3300	J 2	7303	B25		
3301	D 2	7304	N 5		
3301	K 2	7305	J 5		
3302	D 3	7306	B 5		
3302	K 2	7307	C14		
3303	D 3	7308	C18		
3303	J 2	7309	C22		
3304	C 3	7310	F17		
3305	D 4	7311	I17		
3305	K 3	7312	I16		
3306	E 4	7370	I27		
3307	H14	9300	K 5		
3308	F 6	9305	F 8		
3308	N 9	9305	J 6		
3309	B 8	9312	D21		
3310	N 7	9314	L11		
3311	E11	9316	C11		
3312	N 6	9317	I13		
3313	G 8	9318	K18		
3313	N 7	9321	B23		
3314	E13	9322	G11		
3315	F13	9323	B23		
3316	F14	9325	B28		
3317	F26	9326	E 5		
3318	F27	9327	L 5		

TP20



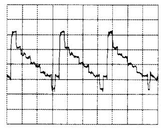
20mV/div AC
10µs div

TP26



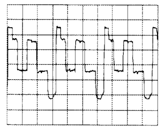
0.2V/div AC
20µs div

TP27



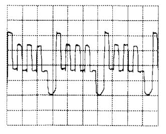
0.1V/div AC
20µs div

TP28



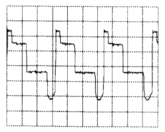
0.5V/div AC
20µs div

TP29



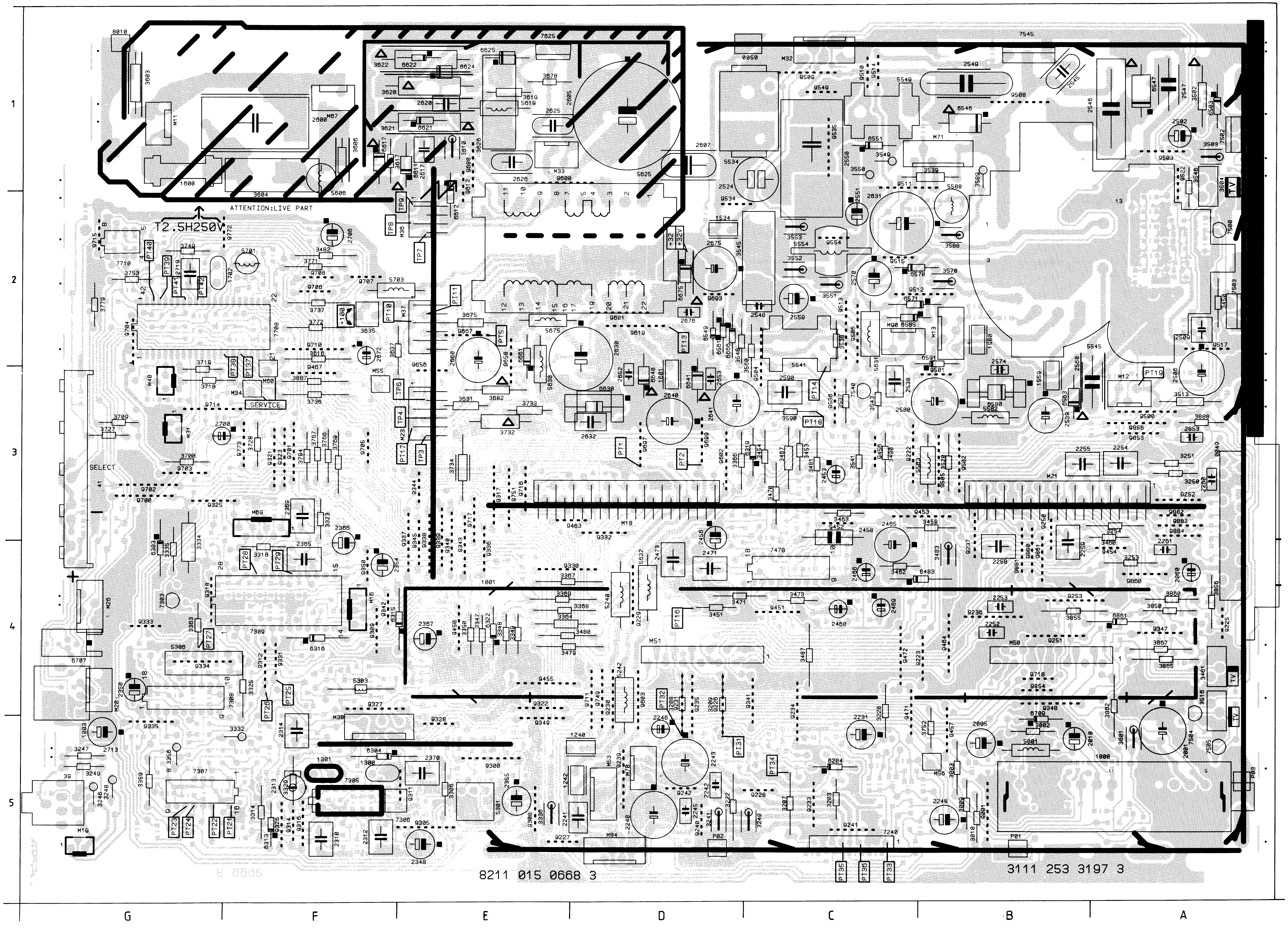
0.5V/div AC
20µs div

TP30



0.5V/div AC
20µs div

Mono carrier / Hauptplatine / Châssis



0049	A3	3323	F3
0050	C1	3325	F4
1000	A5	3329	F5
1003	G4	3332	F5
1240	D5	3334	G4
1242	D5	3335	G4
1300	F5	3336	E5
1301	F5	3347	E4
1534	D2	3348	E4
1559	B3	3349	E4
1580	B2	3350	E4
1600	G1	3356	G5
1601	D3	3359	G5
1702	G2	3363	G4
2001	A5	3364	D4
2005	B5	3366	C3
2010	B5	3367	D4
2231	C5	3368	E4
2240	D5	3369	E4
2241	D5	3450	A2
2242	D5	3451	D4
2243	D5	3453	C3
2245	D5	3454	C3
2246	D5	3459	B3
2248	B5	3460	A3
2252	B4	3461	A4
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2255	B3	3467	C3
2258	B4	3470	C3
2259	B4	3471	C4
2260	A3	3473	C4
2261	A4	3479	D4
2310	F5	3480	D4
2312	F5	3481	C3
2313	F5	3482	F2
2314	F5	3483	B4
2348	E5	3487	C4
2350	G4	3490	C3
2354	F4	3502	A1
2355	E5	3503	A1
2365	F4	3504	A1
2366	F4	3513	A3
2367	E4	3516	A4
2369	F3	3520	B3
2370	E5	3537	C3
2453	C3	3538	C2
2456	D4	3539	B1
2458	C4	3541	C3
2465	C4	3543	C3
2466	C4	3545	C2
2468	C4	3546	A1
2469	C4	3548	C2
2471	D4	3549	C1
2473	D4	3550	C1
2502	A1	3551	C2
2506	A3	3552	C2
2509	A2	3553	C2
2524	C1	3560	C2
2538	C3	3570	B2
2539	B3	3588	B2
2545	B1	3589	B1
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2547	A1	3603	G1
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2580	B3	3622	E1
2590	C3	3626	E1
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2620	E1	3678	E1
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2626	E1	3700	G3
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2631	C2	3718	G3
2632	D3	3719	G3
2640	D3	3727	G3
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2660	E3	3734	E3
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2675	D2	3737	F2
2676	D2	3749	G2
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2706	F2	3753	G2
2713	G5	3766	F3
2719	G2	3767	F3
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2860	A4	3771	F2
3001	A5	3772	F2
3002	B5	3779	G2
3003	B5	3794	F3
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3010	B5	3855	B4
3203	C5	3856	A4
3207	C5	3860	A4
3208	D4	3862	A4
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3228	C4	3887	F3
3240	C5	3888	A3
3241	D5	5001	B5
3246	G5	5240	D4
3247	G5	5242	D4
3248	G5	5301	E5
3249	G5	5303	F4
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3253	A4	5541	C2
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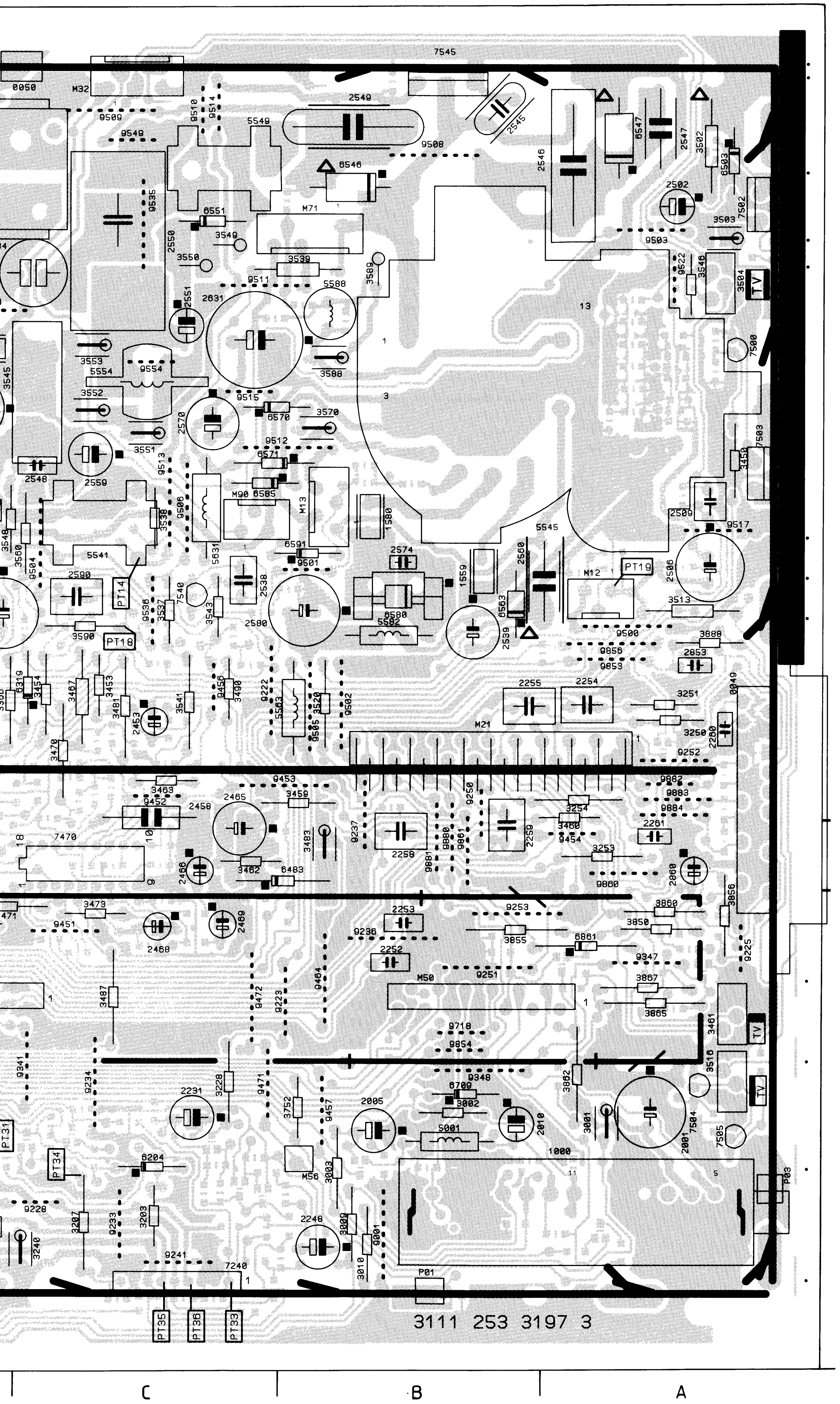
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3010
9001
9241
7240
P01
P03
PT35
PT36
PT33
C
B
A

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0050	C1	3325	F4	5588	B2	9347	A4
1000	A5	3329	F5	5606	F1	9348	B4
1003	G4	3332	F5	5619	E1	9349	E5
1240	D5	3334	G4	5625	D2	9350	F4
1242	D5	3335	G4	5630	E3	9450	E4
1300	F5	3336	E5	5631	C2	9451	C4
1301	F5	3347	E4	5632	D4	9452	C3
1534	D2	3348	E4	5675	E2	9453	B3
1559	B3	3349	E4	5701	F2	9454	A4
1580	B2	3350	E4	5703	E2	9455	E4
1600	G1	3356	G5	6204	C5	9456	C3
1601	D3	3359	G5	6303	G4	9457	B5
1702	G2	3363	G4	6304	F5	9463	D3
2001	A5	3364	D4	6313	F5	9464	B4
2005	B5	3366	C3	6315	E4	9467	F3
2010	B5	3367	D4	6316	F4	9471	C5
2231	C5	3368	E4	6319	C3	9472	C4
2240	D5	3369	E4	6322	E4	9500	A3
2241	D5	3450	A2	6483	B4	9501	B3
2242	D5	3451	D4	6503	A1	9502	B3
2243	D5	3453	C3	6546	B1	9503	A1
2245	D5	3454	C3	6547	A1	9504	C2
2246	D5	3459	B3	6549	D2	9505	B3
2248	B5	3460	A3	6551	C1	9506	C2
2252	B4	3461	A4	6561	D2	9508	B1
2253	B4	3462	C4	6563	B3	9509	C1
2254	A3	3463	C3	6570	B2	9510	C1
2255	B3	3467	C3	6571	B2	9511	C1
2258	B4	3470	C3	6580	B3	9512	B2
2259	B4	3471	C4	6585	C2	9513	C2
2260	A3	3473	C4	6591	B2	9514	C1
2261	A4	3479	D4	6611	E1	9515	C2
2310	F5	3480	D4	6612	E2	9517	A2
2312	F5	3481	C3	6617	F1	9522	A1
2313	F5	3482	F2	6621	E1	9534	D2
2314	F5	3483	B4	6622	E1	9535	C1
2348	E5	3487	C4	6624	E1	9536	C3
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2354	F4	3502	A1	6630	D3	9554	C2
2355	E5	3503	A1	6640	D3	9600	E1
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2366	F4	3513	A3	6661	E2	9602	D3
2367	E4	3516	A4	6666	D2	9603	D4
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2370	E5	3537	C3	6707	G4	9619	D2
2453	C3	3538	C2	6709	B5	9656	E3
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2458	C4	3541	C3	7240	C5	9667	E2
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2471	D4	3549	C1	7308	G5	9700	G3
2473	D4	3550	C1	7309	F4	9701	F3
2502	A1	3551	C2	7470	C4	9702	G3
2506	A3	3552	C2	7500	A2	9703	G3
2509	A2	3553	C2	7502	A1	9704	G2
2524	C1	3560	C2	7503	A2	9705	F3
2538	C3	3570	B2	7504	A5	9706	F2
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2560	A3	3619	E1	9223	B4	9749	D4
2570	C2	3620	E1	9225	A4	9751	E3
2574	B3	3621	E1	9226	D4	9772	F2
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2600	F1	3631	E3	9229	D4	9854	B4
2605	D1	3635	F2	9230	D4	9856	A3
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2617	E1	3675	E2	9233	C5	9861	B4
2620	E1	3678	E1	9234	C5	9880	B4
2625	E1	3682	E3	9235	D4	9881	B4
2626	E1	3700	G3	9236	B4	9882	A3
2630	D3	3709	G3	9237	B3	9883	A3
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2719	G2	3767	F3	9312	F4	M33	E1
2853	A3	3769	F3	9314	F5	M34	F3
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3001	A5	3772	F2	9317	E3	M37	E2
3002	B5	3779	G2	9318	G4	M38	E5
3003	B5	3794	F3	9321	F3	M40	G3
3009	B5	3850	A4	9322	E4	M50	B4
3010	B5	3855	B4	9323	F3	M51	D4
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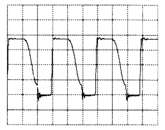
3228	C4	3887	F3	9331	F4	M69	F3
3240	C5	3888	A3	9332	D3	M70	D5
3241	D5	5001	B5	9333	G4	M71	B1
3246	G5	5240	D4	9334	G4	M84	D5
3247	G5	5242	D4	9335	G5	M90	C2
3248	G5	5301	E5	9336	E4	P01	B5
3249	G5	5303	F4	9337	E4	P02	D5
3250	A3	5306	G4	9338	E4	P03	A5
3251	A3	5534	D1	9339	E4		
3253	A4	5541	C2	9340	E4		
3254	A3	5545	B2	9341	C4		
3306	E5	5549	C1	9342	F4		
3314	F5	5554	C2	9343	E4		
3318	F4	5563	B3	9344	E3		

TP1 = DC 15V9

TP2 = DC -15V9

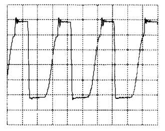
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

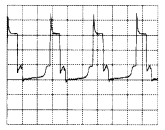


5V/div AC
5µs div

TP6 = DC 4V8

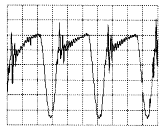
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



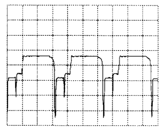
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

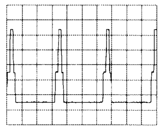
TP12 = DC 2V7

TP14



2V/div AC
20µs div

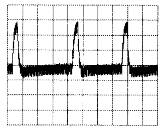
TP16



2V/div AC
20µs div

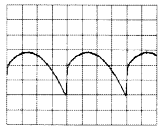
TP17 = DC 0V

TP18



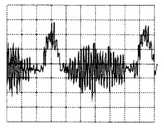
2V/div AC
5ms div

TP19



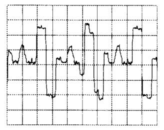
1V/div AC
5ms div

TP20



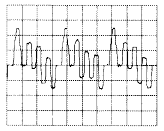
20mV/div AC
10µs div

TP21



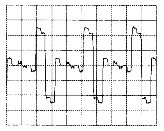
0.1V/div AC
20µs div

TP22



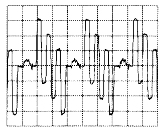
0.2V/div AC
20µs div

TP23



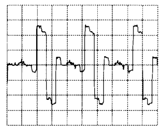
0.2V/div AC
20µs div

TP24



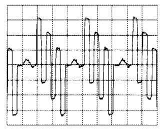
0.2V/div AC
20µs div

TP25



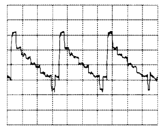
0.2V/div AC
20µs div

TP26



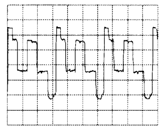
0.2V/div AC
20µs div

TP27



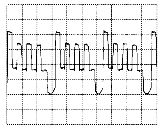
0.1V/div AC
20µs div

TP28



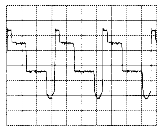
0.5V/div AC
20µs div

TP29



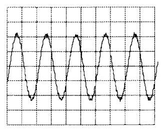
0.5V/div AC
20µs div

TP30



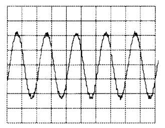
0.5V/div AC
20µs div

TP31



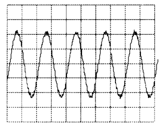
10mV/div AC
0.5ms div

TP32



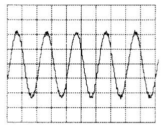
10mV/div AC
0.5ms div

TP33



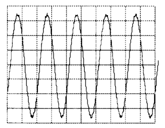
10mV/div AC
0.5ms div

TP34



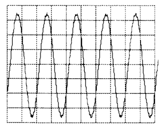
10mV/div AC
0.5ms div

TP35



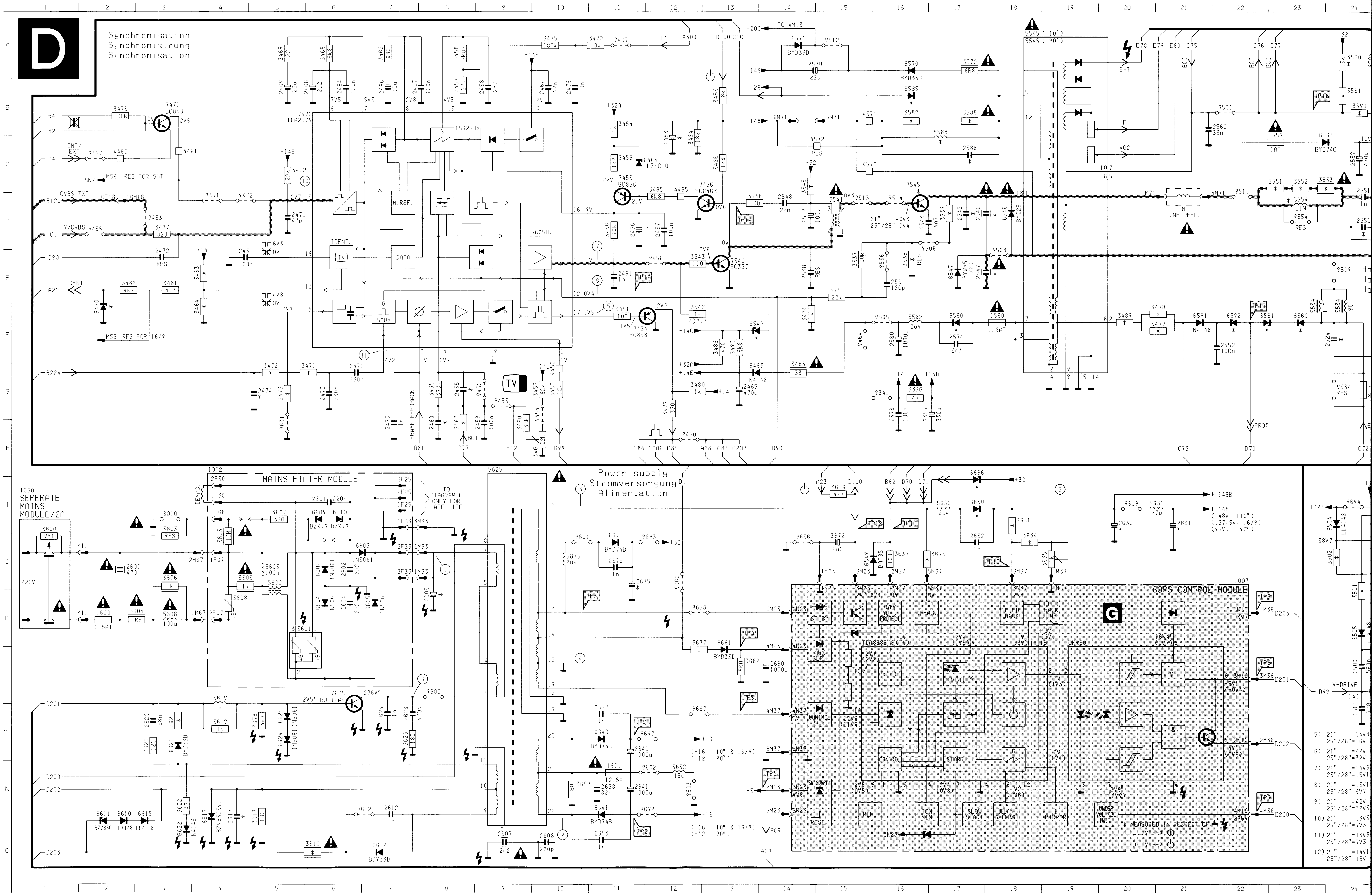
200mV/div AC
0.5ms div

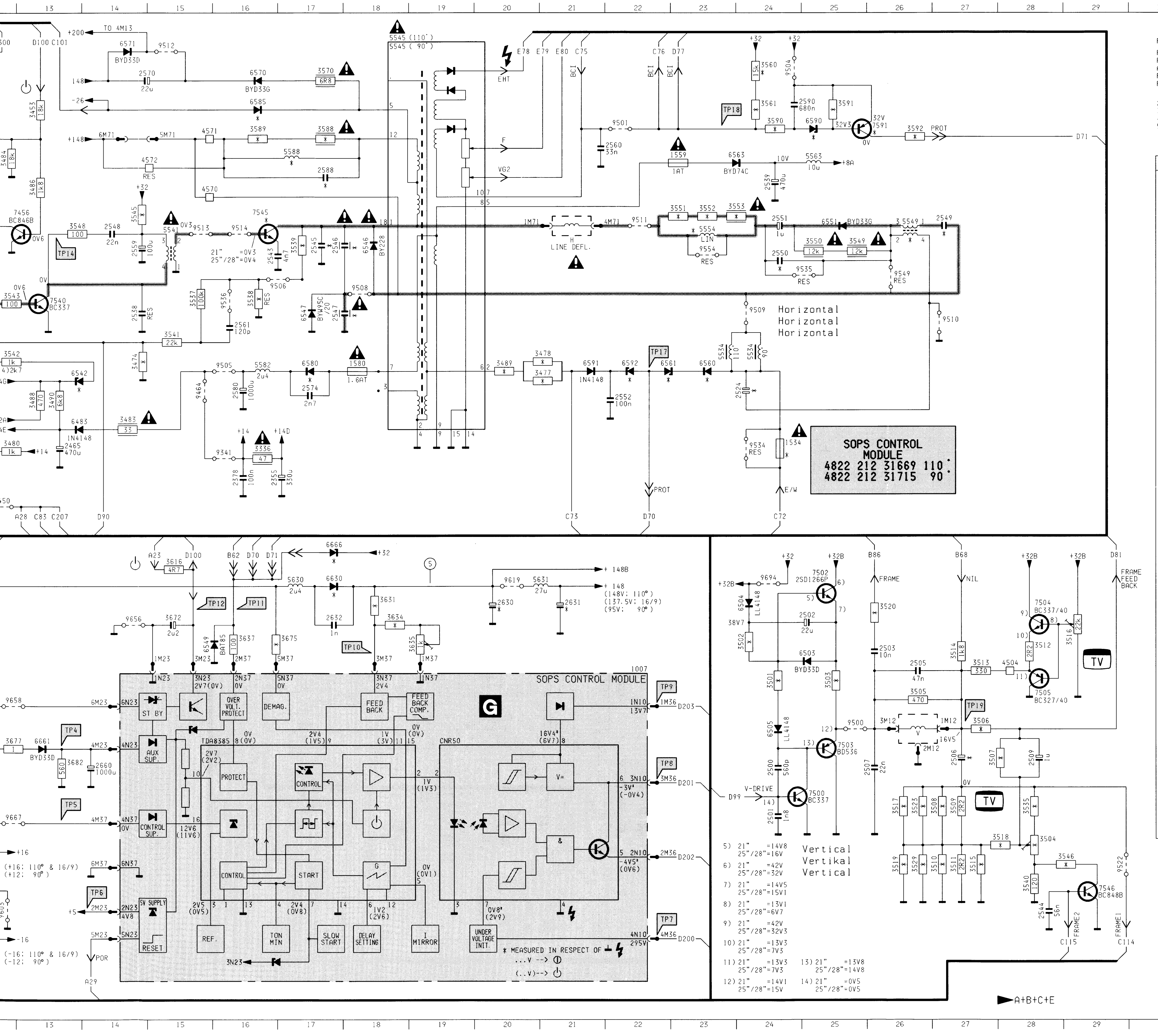
TP36



200mV/div AC
0.5ms div

Power supply/Stromversorgung/Alimentation


D
Synchronisation
Synchronisierung
Synchronisation
7470 TDA2579
15625Hz
H. REF.
IDENT.
DATA
50Hz
7471 BC848
7455 BC856
7456 BC846B
7454 BC858
7540 BC337
7545
LINE DEFL.
H LIN
5545 (110°)
5545 (90°)
EHT
FRAME FEEDBACK
PROT
TV
1050 SEPERATE MAINS MODULE/2A
220V
1002 MAINS FILTER MODULE
DEMAG.
TO DIAGRAM L ONLY FOR SATELLITE
5625
Power supply
Stromversorgung
Alimentation
7625 BUT12AF
1600 2.5AT
1601 T2.5A
1580 1.6AT
1559 1AT
SOPS CONTROL MODULE
1007
G
ST BY
AUX SUP.
CONTROL SUP.
5V SUPPLY
RESET
OVER VOLT. PROTECT
DEMAG.
FEED BACK
FEED BACK COMP.
TDA8385
CNR50
PROTECT
CONTROL
START
REF.
TON MIN
SLOW START
DELAY SETTING
I MIRROR
UNDER VOLTAGE INIT.
* MEASURED IN RESPECT OF
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP14
TP16
TP17
TP18
(+16: 110° & 16/9)
(+12: 90°)
(-16: 110° & 16/9)
(-12: 90°)
+ 148 (148V: 110°) (137.5V: 16/9) (95V: 90°)
V-DRIVE
5) 21" =14V8 25"/28"=16V
6) 21" =42V 25"/28"=32V
7) 21" =14V5 25"/28"=15V1
8) 21" =13V1 25"/28"=6V7
9) 21" =42V 25"/28"=32V3
10) 21" =13V3 25"/28"=7V3
11) 21" =13V3 25"/28"=7V3
12) 21" =14V1 25"/28"=15V


TO 4M13
+200
+148
-26
+32
6571 BYD33D
6570 BYD33G
3570 6R8
6585
3589
3588
5588
4572 RES
2588
4570
7456 BC846B
TP14
3548 100
2548 22n
7545
5541
21" =0V3
25"/28"=0V4
7540 BC337
3543 100
3541 22k
2561 120p
9506
9508
5545 (110°)
5545 (90°)
EHT
E78 E79 E80 C75
C76 D77
BCI
F
VG2
9501
2560 33n
1559 1AT
6563 BYD74C
10V
5563 10u
+8A
2539 470u
TP18
3560 15k
3561
2590 680n
3591
3590
6590
32V 7591
3592 PROT
D71
9504
0V
1M71
H LINE DEFL.
4M71
9511
3551 3552 3553
5554 LIN
9554 RES
2551 1u
6551 BYD33G
5549
2549
3550 12k
3549 12k
2550
9535 RES
9549 RES
9509
9510
Horizontal
Horizontal
Horizontal
9505
5582 2u4
6580
2574 2n7
1580 1.6AT
2580 1000u
3489
3478
3477
6591 1N4148
6592
TP17
6561
6560
2552 100n
5534
2524
9534 RES
1534
PROT
E/W
3483 33
6483 1N4148
2465 470u
6542
3480 1k
3336 47
+14 +14D
9341
2378 100n
2355 330u
A28 C83 C207 D90 C73 D70 C72
SOPS CONTROL MODULE
4822 212 31669 110°
4822 212 31715 90°
A23 D100
3616 4R7
B62 D70 D71
6666
5630 2u4
6630
2632 1n
3631
3634
3635
9619
5631 27u
2630
2631
+ 148B
+ 148
(148V: 110°)
(137.5V: 16/9)
(95V: 90°)
9656
3672 2u2
TP12
TP11
6549
BA185
3637
3675
TP10
1M23 3M23 2M37 5M37 3M37 1M37
SOPS CONTROL MODULE
1007
G
TDA8385
ST BY
AUX SUP.
CONTROL SUP.
OVER VOLT. PROTECT
DEMAG.
FEED BACK
FEED BACK COMP.
PROTECT
CONTROL
CNR50
START
CONTROL
REF.
TON MIN
SLOW START
DELAY SETTING
I MIRROR
UNDER VOLTAGE INIT.
5V SUPPLY
RESET
TP4
TP5
TP6
TP7
TP8
TP9
3677 1
6661 BYD33D
3682
2660 1000u
6N23 4N23 4N37 6N37 2N23 5N23
1N10 13V7
3N10 3M36
2N10 2M36
4N10 295V
D203 D201 D202 D200
16V4* (6V7)
-3V* (-0V4)
-4V5* (0V6)
0V8* (2V9)
* MEASURED IN RESPECT OF
(..V) --> ①
(..V) --> ⏻
(+16: 110° & 16/9)
(+12: 90°)
(-16: 110° & 16/9)
(-12: 90°)
POR
A29
3N23
+32 +32B
9694
7502 2SD1266P
6504 LL4148
2502 22u
38V7
3502
6503 BYD33D
3501
3503
6505 LL4148
7503 BD536
9500
3M12
1M12
2M12
16V5
V
TP19
3506
7500 BC337
V-DRIVE
D99
2501 1n8
2500 560p
2507 22n
2503 10n
2505 47n
3505 470
3520
B86 FRAME
B68 NIL
3514 1k8
3513 330
4504
7504 BC337/40
7505 BC327/40
3512
3516 22k
TV
2506
3507
2509 1u
3517 3523 3508 3509 3535
3518
3504
3519 3529 3510 3511 3515
3540 120
2544 56n
3546
7546 BC848B
9522
FRAME2
FRAME1
C115 C114
D81 FRAME FEED BACK
Vertical
Vertikal
Vertical
5) 21" =14V8
25"/28"=16V
6) 21" =42V
25"/28"=32V
7) 21" =14V5
25"/28"=15V1
8) 21" =13V1
25"/28"=6V7
9) 21" =42V
25"/28"=32V3
10) 21" =13V3
25"/28"=7V3
11) 21" =13V3
25"/28"=7V3
12) 21" =14V1
25"/28"=15V
13) 21" =13V8
25"/28"=14V8
14) 21" =0V5
25"/28"=0V5
A+B+C+E

D

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) 25"-28" BLACK-LINE S
2) 21"-90°
3) BLACK-LINE 16/9
4) 21"-110°
5) 29"

*	1)	2)	3)	4)	5)
1534	315mA	-	315mA	315mA	315mA
2453	22u	22u	22u	22u	22u
2455	1n	1n	3n3	560p	3n3
2460	2n7	10n	10n	1n5	3n3
2474	-	-	100n	-	-
2506	1000u	1000u	2200u	1000u	1000u
2524	-	4u7	-	-	-
2545	1n5	1n2	1n5	1n2	1n5
2546	11n	13n	12n	7n5	13n
2547	27n	47n	22n	22n	27n
2549	470n	-	470n	470n	470n
2550	390n	680n	-	330n	680n
2588	JMP	RES	470p	-	-
2605	220u	150u	220u	220u	220u
2617	1u	470n	1u	1n	1u
2630	100u	47u	100u	100u	100u
2631	100u	47u	100u	100u	100u
2662	270p	220p	270p	-	270p
2663	82p	100p	82p	-	82p
2675	1000u	680u	1000u	100u	1000u
3463	18k	18k	3k3	18k	18k
3464	12k	12k	-	12k	12k
3467	2M7	3M3	2M2	3M9	2M7
3471	120k	470k	120k	270k	270
3472	-	-	820k	-	-
3473	270k	270k	330k	270k	270k
3474	5k6	5k6	2k7	5k6	5k6
3477	2R2	0R5	-	0R5	0R5
3478	4R7	0R5	-	0R5	0R5
3489	0R5	1R	-	0R5	0R5
3501	22	27	27	22	22
3502	1k2	2k7	1k2	1k2	1k2
3503	1R2	4R7	1R2	1R2	1R5
3504	100	100	-	100	100
3506	330k	330k	270k	330k	470k
3507	22k	27k	22k	27k	33k
3508	2R2	2R2	-	-	2R2
3510	2R2	2R2	2R2	-	2R2
3515	2R2	2R2	-	2R2	2R2
3517	2R2	-	2R2	2R2	2R2
3518	-	-	10	-	-
3519	2R2	-	2R2	2R2	2R2
3520	4k7	4k7	-	4k7	4k7
3523	2R2	1n	2R2	1n	2R2
3529	2R2	-	2R2	1n	2R2
3535	120	150	-	120	120
3539	470k	470k	470k	470k	470k
3542	1k	2k7	-	1k	1k
3545	180	330	180	330	220
3546	180	120	-	150	180
3551	560	560	-	560	560
3552	560	560	-	560	560
3553	560	560	-	560	560
3560	15k	33k	15k	15k	15k
3561	2k2	3k3	5k6	12k	2k2
3588	-	27	560	27	-
3589	-	27	1k5	27	-
3590	330k	-	100k	330k	330k
3591	6k8	-	6k8	6k8	6k8
3592	680	-	680	680	680
3610	8R2	6R8	8R2	8R2	8R2
3621	27	56	27	27	27
3631	220k	120k	220k	220k	220k
3634	3k3	2k7	3k3	3k3	3k3
3675	120k	47k	120k	120k	120k
5549	100u	-	100u	100u	100u
5554	COIL LC90	AT4042/97	-	AT4042/97	COIL LC90
5588	100u	22u	100u	22u	100u
5619	3u9	4u7	3u9	3u9	3u9
6642	BZX79/C15	BZX79/C22	-	BZX79/C15	BZX79/C15
6560	LL4148	-	LL4148	LL4148	LL4148
6561	BZX79/C68	-	BZX79/C68	BZX79/C68	BZX79/C68
6580	BYV28-200/20	BYV28-200	BYU29F	BYV28-200/20	BYV28-200
6585	BYD33G	-	BYD33G	BYD33G	BYD33G
6590	LLZ/C33	-	LLZ/C33	LLZ/C33	LLZ/C33
6592	LLZ/C27	LLZ/C27	-	LLZ/C27	LLZ/C22
6630	BY229F-600	BYD74G	BY229F-600	BY229F-600	BY229F-600
6666	LLZ/C36	LLZ/C43	LLZ/C36	LLZ/C36	LLZ/C36
6470	-	-	LLZ/CW8	-	-
7575	BU508AF	BU508AF	BU508AF	BU508AF	BU2520AF
7591	BC858B	-	BC858B	BC858B	BC858B

1002	H 4	3481	E 3	6542	F13
1007	J22	3482	E 2	6546	D18
1050	I 1	3483	G14	6547	E17
1534	G24	3484	C12	6549	J15
1559	C23	3485	C12	6551	D25
1580	F18	3486	C13	6560	F23
1600	K 2	3487	D 3	6561	F22
1601	N11	3488	F13	6563	C24
2355	G16	3489	F20	6570	A16
2378	G16	3490	F13	6571	A14
2451	E 4	3501	K24	6580	F17
2453	C12	3502	J24	6585	B16
2455	G 8	3503	K25	6590	B25
2456	D11	3504	M28	6591	F21
2457	D12	3505	K26	6592	F22
2458	B 9	3506	K27	6602	J 6
2459	H 9	3507	L27	6603	J 7
2460	H 8	3508	L27	6604	K 6
2461	E11	3509	L27	6605	K 7
2462	B10	3510	M27	6610	N 2
2464	B 6	3511	M27	6611	N 2
2465	G13	3512	J28	6612	O 7
2466	B 7	3513	J27	6615	N 3
2467	B 7	3514	J27	6617	N 4
2468	B 6	3515	M27	6621	M 3
2469	B 5	3516	J29	6622	O 3
2470	D 5	3517	L26	6624	M 5
2471	G 6	3518	M28	6625	M 5
2472	E 3	3519	M26	6630	I17
2473	G 6	3520	I26	6640	M11
2474	G 5	3523	L26	6641	N11
2475	H 7	3529	M26	6661	K13
2476	B10	3535	L28	6666	H17
2500	L24	3537	E15	6675	J11
2501	M24	3538	E16	7454	F12
2502	J25	3539	D17	7455	C11
2503	J26	3540	N28	7456	C13
2505	J26	3541	E15	7470	B 6
2506	L27	3542	F12	7471	B 3
2507	L26	3543	E12	7500	L25
2509	L28	3545	C14	7502	I25
2524	F24	3546	M29	7503	L25
2538	E14	3548	D13	7504	I28
2539	C24	3549	D25	7505	K28
2543	D16	3550	D25	7540	E13
2544	N28	3551	C23	7545	C16
2545	D17	3552	C23	7546	N29
2546	D17	3553	C24	7591	B26
2547	E17	3560	A24	7625	L 6
2548	D14	3561	B24	8010	I 3
2549	D27	3570	A17	9341	G16
2550	D24	3588	B17	9450	H12
2551	D24	3589	B16	9452	G 9
2552	F22	3590	B24	9453	G 9
2559	D14	3591	B25	9454	G10
2560	B22	3592	B26	9455	D 2
2561	E16	3600	I 1	9456	E12
2570	A14	3601	K 5	9457	C 2
2574	F17	3603	I 3	9463	D 3
2580	F16	3603	J 4	9464	F15
2588	C17	3604	K 3	9467	A11
2590	B24	3605	J 4	9471	D 4
2600	J 2	3606	J 3	9472	D 4
2601	I 6	3607	I 5	9500	K25
2602	J 6	3608	K 4	9501	B22
2604	K 6	3610	O 6	9504	A24
2605	K 8	3616	I15	9505	F16
2607	O 9	3617	N 5	9506	D17
2608	O10	3619	M 4	9508	E18
2612	N 7	3620	M 3	9509	E24
2617	N 4	3621	M 3	9510	E27
2620	M 3	3622	N 3	9511	D22
2625	M 7	3626	M 7	9512	A15
2626	M 7	3631	I18	9513	D15
2630	I20	3634	J18	9514	D16
2631	I21	3635	J19	9522	M29
2632	J17	3637	J16	9534	G24
2640	M11	3659	N10	9535	D25
2641	N11	3672	J15	9536	E16
2652	M11	3675	J17	9549	D26
2653	O11	3677	K12	9554	D23
2658	N11	3678	M 5	9600	L 8
2660	L14	3682	L13	9601	J10
2675	J11	4452	G10	9602	N12
2676	J11	4460	C 2	9603	N12
3336	G16	4461	C 3	9612	N 7
3450	G10	4485	C12	9619	I20
3451	F11	4504	J28	9631	H 5
3453	B13	4570	C15	9656	J14
3454	B11	4571	B15	9658	K12
3455	C11	4572	C15	9666	J12
3456	D11	5534	E23	9667	M12
3457	B 8	5534	E24	9693	J12
3458	A 8	5541	D15	9694	I24
3459	G10	5545	A18	9697	M12
3460	H 9	5545	A18	9699	N12
3461	H10	5549	D26		
3462	C 5	5554	D23		
3463	E 4	5563	C25		
3464	F 4	5582	F16		
3465	G 8	5588	B17		
3466	A 7	5600	J 5		
3467	H 8	5605	J 5		
3468	A 6	5606	K 3		
3469	A 5	5619	L 4		
3470	A11	5625	H 9		
3471	G 6	5630	I17		
3472	G 5	5631	I21		
3473	G 5	5632	N12		
3474	F14	5875	J10		
3475	A10	6464	C11		
3476	B 2	6470	F 2		
3477	F21	6483	G13		
3478	F21	6503	J25		
3479	G12	6504	I24		
3480	G12	6505	K24		

CHASSIS GR2.4

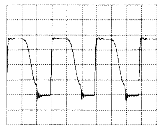
CL 46532061/016.DPAR
181094

Mono carrier / Hauptplatine / Châssis

TP1 = DC 15V9

TP2 = DC -15V9

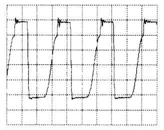
TP3



20V/div AC
5µs div

TP4 = DC 9V7

TP5

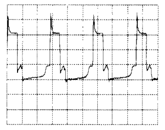


5V/div AC
5µs div

TP6 = DC 4V8

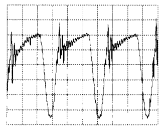
TP7 = DC 298V

TP8



2V/div AC
5µs div

TP9



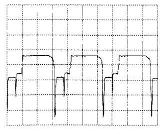
0.2V/div AC
5µs div

TP10 = DC 2V4

TP11 = DC 0V

TP12 = DC 2V7

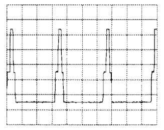
TP14



2V/div AC
20µs div

TP15 = DC 13V4

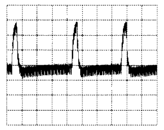
TP16



2V/div AC
20µs div

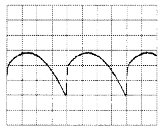
TP17 = DC 0V

TP18



2V/div AC
5ms div

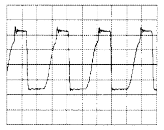
TP19



1V/div AC
5ms div

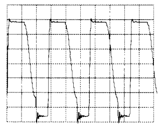
① = DC 298V

②



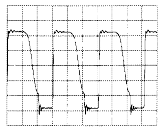
10V/div AC
5µs div

③



50V/div AC
5µs div

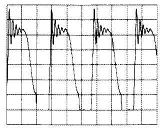
④



5V/div AC
5µs div

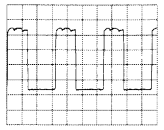
(5a) = DC 144V

⑥



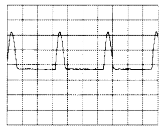
100V/div AC
5µs div

⑦



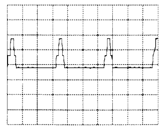
0.5V/div AC
20µs div

⑧



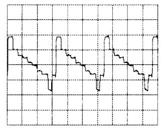
1V/div AC
20µs div

⑨

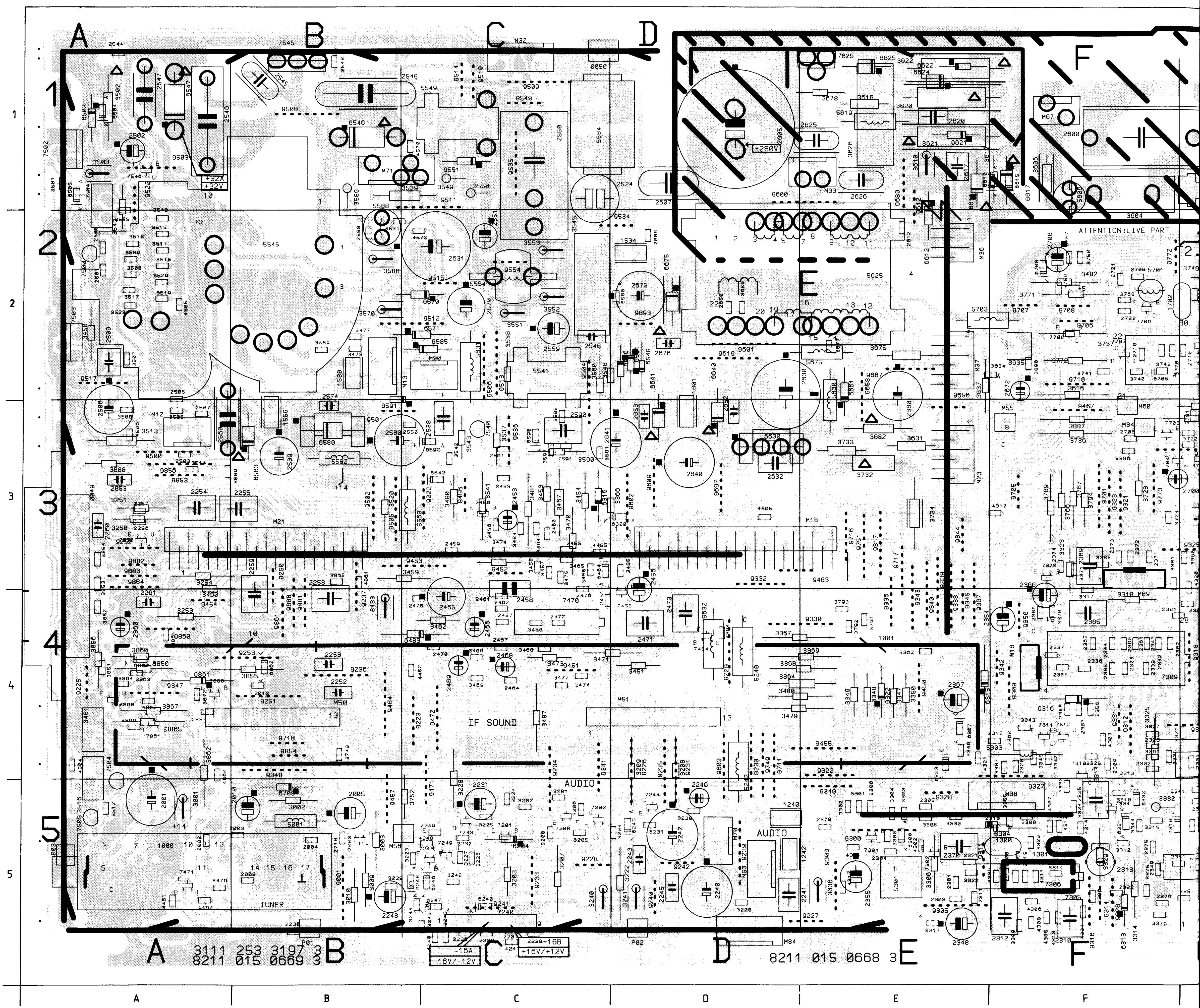


5V/div AC
20µs div

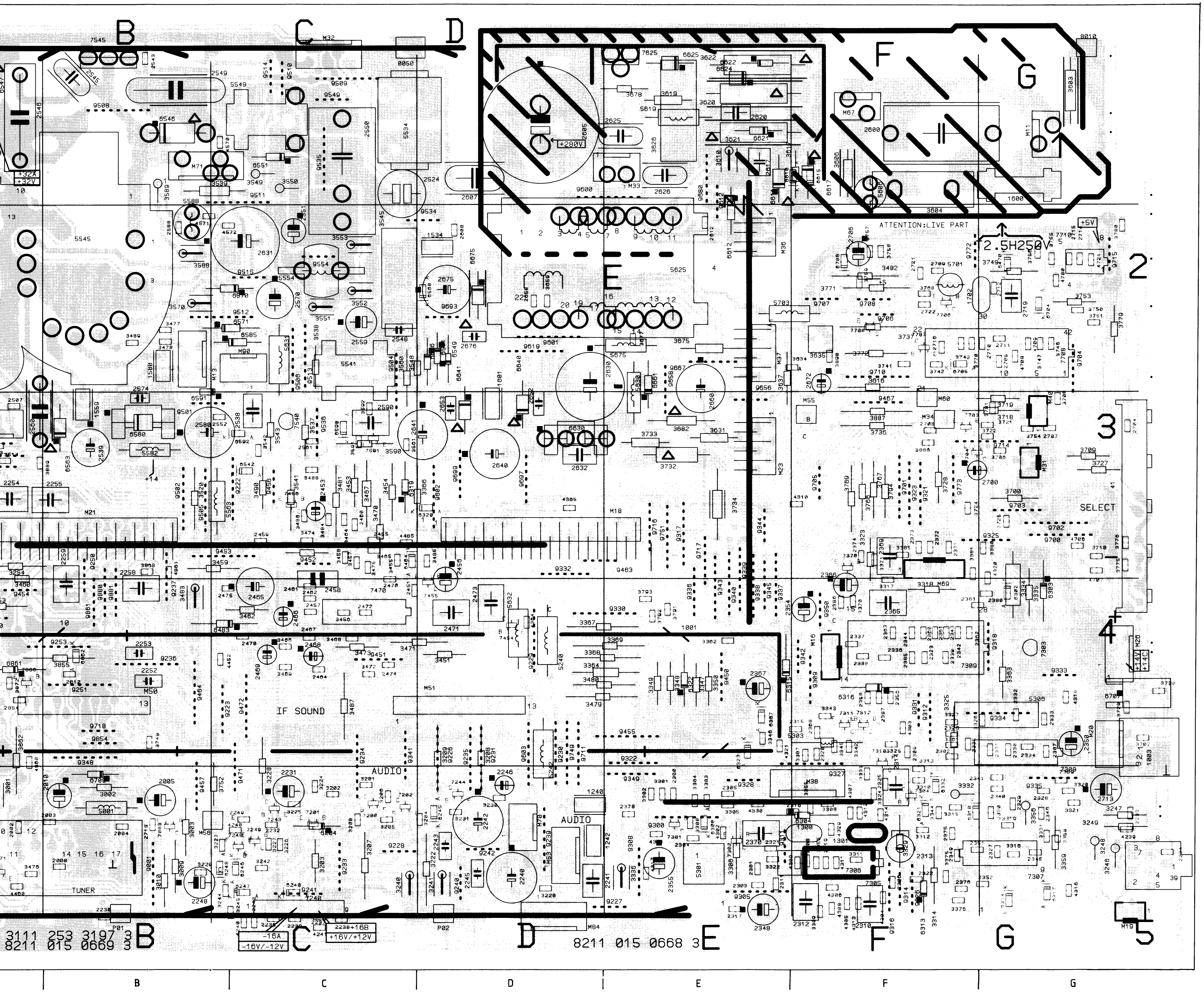
⑩



0.5V/div AC
20µs div


A
B
C
D
E
F
1
2
3
4
5
+280V
+32A
+32V
ATTENTION:LIVE PART
IF SOUND
AUDIO
AUDIO
TUNER
3111 253 3197 3
8211 015 0669 3
8211 015 0668 3
-16A
-16V/-12V
+16B
+16V/+12V

Mono carrier / Hauptplatine / Châssis



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2362	F4
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2367	E4
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2376	F5
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2600	F1
2605	D1
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7455	D4
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7470	C4
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7503	A2
7504	A5
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M70	D5
M71	B1
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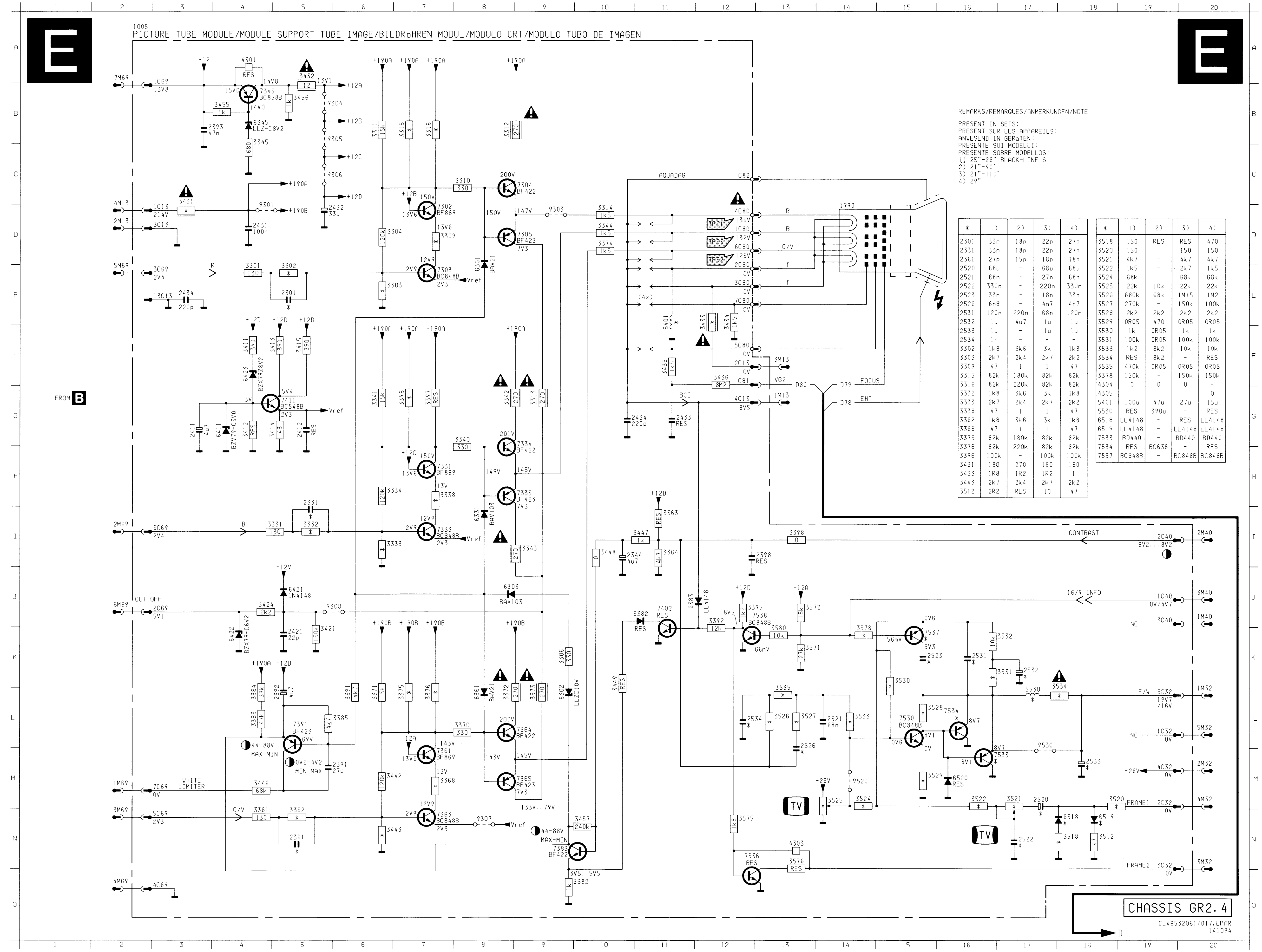
M90	C2
P01	B5
P02	D5
P03	A5

Picture tube panel/Bildröhren platte/Platine TRC


E
1005
PICTURE TUBE MODULE/MODULE SUPPORT TUBE IMAGE/BILDRoHREN MODUL/MODULO CRT/MODULO TUBO DE IMAGEN
7M69
1C69
13V8
4M13
1C13
214V
2M13
3C13
5M69
3C69
2V4
13C13
2434
220p
FROM B
2M69
6C69
6M69
CUT OFF
2C69
5V1
1M69
7C69
0V
WHITE LIMITER
3M69
5C69
2V3
4M69
4C69
+12
+12A
+12B
+12C
+12D
+190A
+190B
+190B
+12V
4301
RES
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BC858B
6345
LLZ-C8V2
3432
3431
9301
+190B
2431
100n
2432
33u
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BF869
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BC848B
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BF422
7305
BF423
6301
BAV21
Vref
AQUADAG
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4C80
1C80
6C80
2C80
3C80
7C80
5C80
TP51
TP53
TP52
136V
132V
128V
R
B
G/V
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1990
(4x)
5401
3433
3434
3435
3436
8M2
2C13
3M13
C81
VG2
D80
D79
FOCUS
4C13
1M13
BCI
D78
EHT
8V5
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220p
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RES
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BC548B
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BF423
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7391
BF423
44-88V
MAX-MIN
0V2-4V2
MIN-MAX
2391
27p
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68k
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BC848B
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BF422
7365
BF423
6361
BAV21
6302
LLZC10V
9307
7383
BF422
3V5...5V5
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240k
133V...79V
3447
2344
4u7
3448
3363
3364
2398
RES
3398
CONTRAST
2C40
6V2...8V2
2M40
6382
RES
7402
RES
6383
LL4148
3392
12k
3395
7538
BC848B
66mV
3580
10k
3572
3571
16/9 INFO
1C40
0V/4V7
3M40
NC
3C40
1M40
3578
7537
56mV
5V3
2523
2531
3532
3531
2532
5530
3534
E/W
5C32
19V7 /16V
1M32
3535
2534
3526
3527
2521
68n
3533
3530
7530
BC848B
3528
7534
8V7
8V1
7533
2526
9530
2533
NC
1C32
5M32
-26V
4C32
2M32
3529
6520
RES
9520
TV
3525
3524
3522
3521
2520
3520
FRAME1
2C32
4M32
6518
6519
3518
3512
2522
3575
7536
RES
4303
3576
RES
FRAME2
3C32
3M32
CHASSIS GR2.4
CL 46532061/017.EPAR
141094
D

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

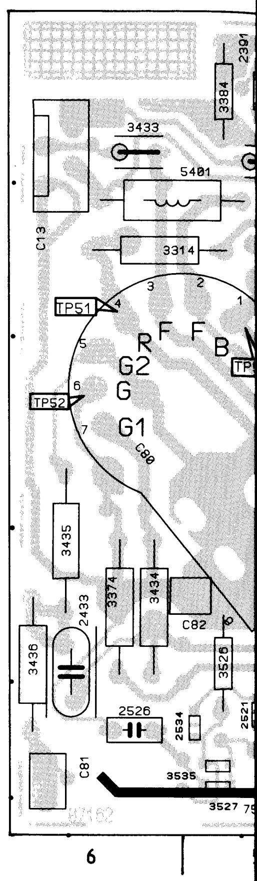
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERaTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) 21"-110˚
4) 29"

*	1)	2)	3)	4)
2301	33p	18p	22p	27p
2331	33p	18p	22p	27p
2361	27p	15p	18p	18p
2520	68u	-	68u	68u
2521	68n	-	27n	68n
2522	330n	-	220n	330n
2523	33n	-	18n	33n
2526	6n8	-	4n7	4n7
2531	120n	220n	68n	120n
2532	1u	4u7	1u	1u
2533	1u	-	1u	1u
2534	1n	-	-	-
3302	1k8	3k6	3k	1k8
3303	2k7	2k4	2k7	2k2
3309	47	1	1	47
3315	82k	180k	82k	82k
3316	82k	220k	82k	82k
3332	1k8	3k6	3k	1k8
3333	2k7	2k4	2k7	2k2
3338	47	1	1	47
3362	1k8	3k6	3k	1k8
3368	47	1	1	47
3375	82k	180k	82k	82k
3376	82k	220k	82k	82k
3396	100k	-	100k	100k
3431	180	270	180	180
3433	1R8	1R2	1R2	1
3443	2k7	2k4	2k7	2k2
3512	2R2	RES	10	47

*	1)	2)	3)	4)
3518	150	RES	RES	470
3520	150	-	150	150
3521	4k7	-	4k7	4k7
3522	1k5	-	2k7	1k5
3524	68k	-	68k	68k
3525	22k	10k	22k	22k
3526	680k	68k	1M15	1M2
3527	270k	-	150k	100k
3528	2k2	2k2	2k2	2k2
3529	0R05	470	0R05	0R05
3530	1k	0R05	1k	1k
3531	100k	0R05	100k	100k
3533	1k2	8k2	10k	10k
3534	RES	8k2	-	RES
3535	470k	0R05	0R05	0R05
3378	150k	-	150k	150k
4304	0	0	0	-
4305	-	-	-	0
5401	100u	47u	27u	15u
5530	RES	390u	-	RES
6518	LL4148	-	RES	LL4148
6519	LL4148	-	LL4148	LL4148
7533	BD440	-	BD440	BD440
7534	RES	BC636	-	RES
7537	BC848B	-	BC848B	BC848B

1005	A 2	3580	K13
1990	D14	4301	A 4
2301	E 5	4303	N13
2331	H 5	5401	E11
2344	I10	5530	L17
2361	N 5	6301	D 8
2391	M 5	6302	L 9
2392	L 5	6303	J 8
2393	B 3	6331	I 8
2398	I13	6345	B 4
2411	G 3	6361	L 8
2412	G 5	6382	J11
2421	K 5	6383	J11
2431	D 4	6411	G 4
2432	D 5	6421	J 5
2433	G12	6422	K 4
2434	E 3	6423	F 4
2434	G11	6518	N18
2520	M17	6519	N18
2521	L14	6520	M16
2522	N17	7302	D 7
2523	K15	7303	E 7
2526	M13	7304	C 9
2531	K16	7305	D 9
2532	K17	7331	H 7
2534	L12	7333	I 7
3301	E 4	7334	H 9
3302	E 5	7335	H 9
3303	E 6	7345	B 4
3304	D 6	7361	M 7
3306	K 9	7363	N 7
3309	D 7	7364	L 9
3310	C 8	7365	M 9
3311	B 6	7383	N 9
3312	B 8	7391	L 5
3313	G 9	7402	J11
3314	D10	7411	G 5
3315	B 7	7530	L15
3316	B 7	7533	M16
3331	I 5	7534	L16
3332	I 5	7536	N12
3333	I 6	7537	K15
3334	H 6	7538	J12
3338	H 7	9301	D 4
3340	G 8	9301	O 3
3341	G 6	9303	D 9
3342	G 8	9304	B 5
3343	I 9	9305	B 5
3344	D10	9306	C 5
3345	B 4	9307	N 8
3361	N 4	9308	J 5
3362	N 5	9309	O 3
3363	I11	9530	L17
3364	I11		
3368	M 7		
3370	L 8		
3371	L 6		
3372	L 8		
3373	L 9		
3374	D10		
3375	L 7		
3376	L 7		
3382	O 9		
3383	L 4		
3384	L 4		
3385	L 6		
3391	L 6		
3392	J12		
3395	J12		
3396	G 7		
3397	G 7		
3398	I13		
3411	F 4		
3412	G 4		
3413	F 5		
3414	G 5		
3415	F 5		
3421	J 5		
3424	J 4		
3431	D 3		
3432	A 5		
3433	E12		
3434	E12		
3435	F11		
3436	F12		
3442	M 6		
3443	N 6		
3446	M 4		
3447	I11		
3448	I10		
3449	K10		
3455	B 4		
3456	B 5		
3457	N10		
3512	N18		
3518	N18		
3520	M18		
3521	M17		
3522	M16		
3524	M14		
3525	M14		
3526	L13		
3527	L13		
3528	L15		
3529	M15		
3530	K15		
3531	K17		
3532	K17		
3533	L14		
3534	L18		
3535	L13		
3571	K13		
3572	J13		
3575	N12		
3576	N13		
3578	K14		

1005 PICTURE T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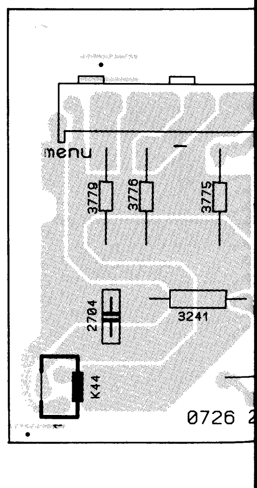
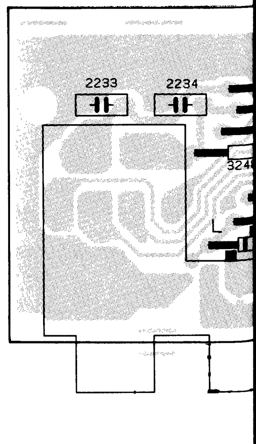
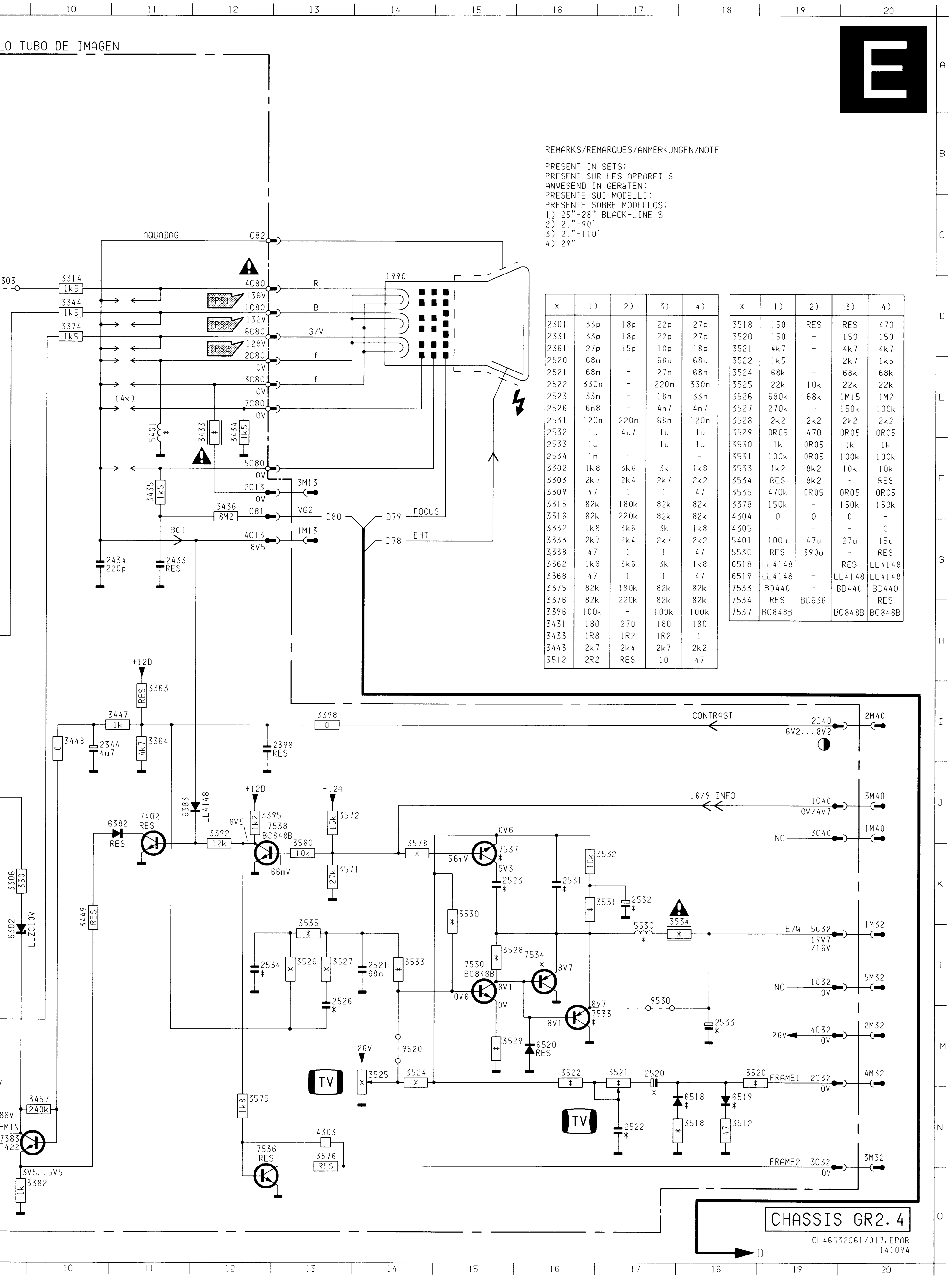
5401
3314
TP51
TP52
G2
G
G1
C86
3435
3374
3434
2433
C82
3436
2526
C81
3535
3527
6

1060 SEPARATE


menu
3779
3776
3775
2704
3241
K44
0726

1060 SEPARAT

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LO TUBO DE IMAGEN
AQUADAG
1990
C82
4C80
136V
1C80
132V
6C80
128V
2C80
3C80
7C80
5C80
2C13
C81
4C13
8V5
VG2
D80
D79
D78
FOCUS
EHT
R
B
G/V
TP51
TP53
TP52
3314 1k5
3344 1k5
3374 1k5
5401
3433
3434 1k5
3435 1k5
3436 8M2
3M13
1M13
BCI
2434 220p
2433 RES
+12D
3447 1k
3363 RES
3364 4k7
3448 0
2344 4u7
3398 0
2398 RES
CONTRAST
2C40 6V2...8V2
2M40
16/9 INFO
1C40 0V/4V7
3M40
1M40
NC
3C40
6383 LL4148
6382 RES
7402 RES
3392 12k
3395 1k2
7538 BC848B
3580 10k
66mV
+12A
3572 15k
3571 27k
3578
7537
56mV
0V6
5V3
2523
2531
3532 10k
3531
2532
5530
3534
E/W 5C32 19V7 /16V
1M32
3535
2534
3526
3527
2521 68n
3533
3530
3528
7534
8V7
7530 BC848B
8V1
7533
9530
2533
2526
3529
6520 RES
NC 1C32 0V
5M32
-26V 4C32 0V
2M32
-26V
9520
3525
3524
3522
3521
2520
3520 FRAME1 2C32 0V
4M32
6518
6519
3518
3512
2522
TV
3575 1k8
7536 RES
4303
3576 RES
FRAME2 3C32 0V
3M32
3306 330
6302 LLZC10V
3449 RES
3457 240k
7383
3382 1k
3V5..5V5
CHASSIS GR2.4
CL46532061/017.EPAR 141094
D

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

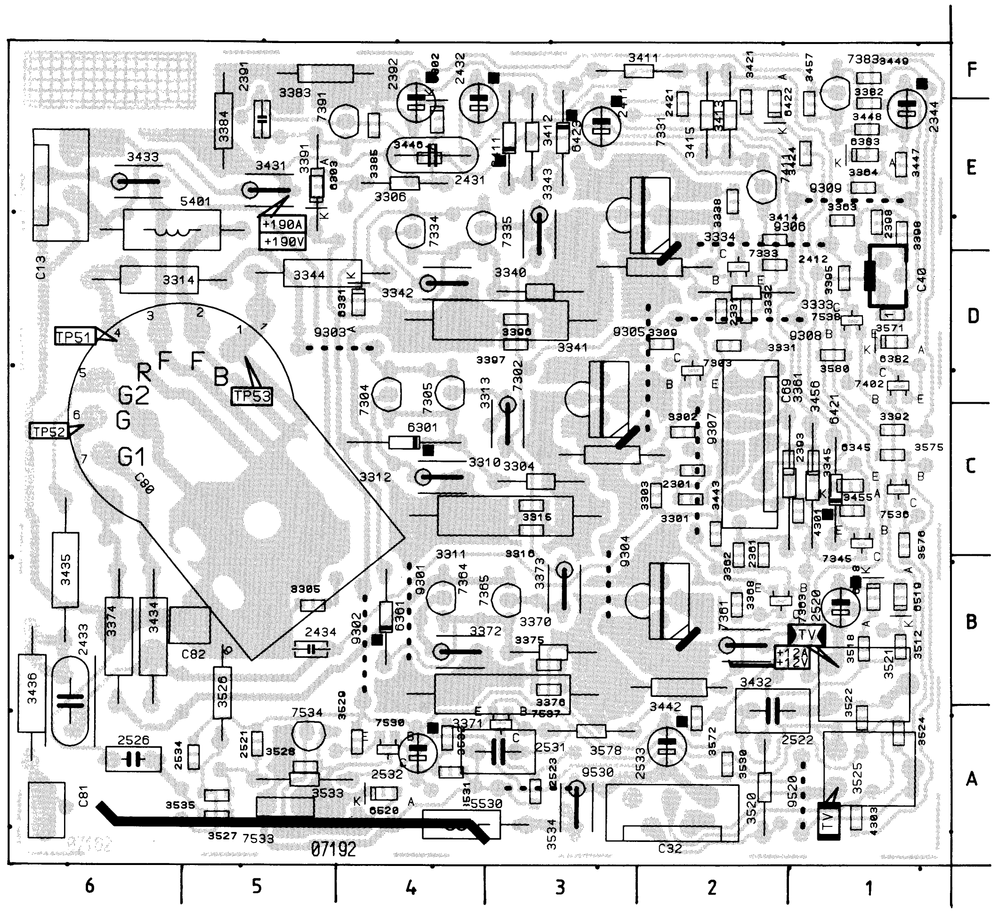
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) 25"-28" BLACK-LINE S
2) 21"-90˚
3) 21"-110˚
4) 29"

*	1)	2)	3)	4)
2301	33p	18p	22p	27p
2331	33p	18p	22p	27p
2361	27p	15p	18p	18p
2520	68u	-	68u	68u
2521	68n	-	27n	68n
2522	330n	-	220n	330n
2523	33n	-	18n	33n
2526	6n8	-	4n7	4n7
2531	120n	220n	68n	120n
2532	1u	4u7	1u	1u
2533	1u	-	1u	1u
2534	1n	-	-	-
3302	1k8	3k6	3k	1k8
3303	2k7	2k4	2k7	2k2
3309	47	1	1	47
3315	82k	180k	82k	82k
3316	82k	220k	82k	82k
3332	1k8	3k6	3k	1k8
3333	2k7	2k4	2k7	2k2
3338	47	1	1	47
3362	1k8	3k6	3k	1k8
3368	47	1	1	47
3375	82k	180k	82k	82k
3376	82k	220k	82k	82k
3396	100k	-	100k	100k
3431	180	270	180	180
3433	1R8	1R2	1R2	1
3443	2k7	2k4	2k7	2k2
3512	2R2	RES	10	47

*	1)	2)	3)	4)
3518	150	RES	RES	470
3520	150	-	150	150
3521	4k7	-	4k7	4k7
3522	1k5	-	2k7	1k5
3524	68k	-	68k	68k
3525	22k	10k	22k	22k
3526	680k	68k	1M15	1M2
3527	270k	-	150k	100k
3528	2k2	2k2	2k2	2k2
3529	0R05	470	0R05	0R05
3530	1k	0R05	1k	1k
3531	100k	0R05	100k	100k
3533	1k2	8k2	10k	10k
3534	RES	8k2	-	RES
3535	470k	0R05	0R05	0R05
3378	150k	-	150k	150k
4304	0	0	0	-
4305	-	-	-	0
5401	100u	47u	27u	15u
5530	RES	390u	-	RES
6518	LL4148	-	RES	LL4148
6519	LL4148	-	LL4148	LL4148
7533	BD440	-	BD440	BD440
7534	RES	BC636	-	RES
7537	BC848B	-	BC848B	BC848B

1005	A 2	3580	K13
1990	D14	4301	A 4
2301	E 5	4303	N13
2331	H 5	5401	E11
2344	I10	5530	L17
2361	N 5	6301	D 8
2391	M 5	6302	L 9
2392	L 5	6303	J 8
2393	B 3	6331	I 8
2398	I13	6345	B 4
2411	G 3	6361	L 8
2412	G 5	6382	J11
2421	K 5	6383	J11
2431	D 4	6411	G 4
2432	D 5	6421	J 5
2433	G12	6422	K 4
2434	E 3	6423	F 4
2434	G11	6518	N18
2520	M17	6519	N18
2521	L14	6520	M16
2522	N17	7302	D 7
2523	K15	7303	E 7
2526	M13	7304	C 9
2531	K16	7305	D 9
2532	K17	7331	H 7
2534	L12	7333	I 7
3301	E 4	7334	H 9
3302	E 5	7335	H 9
3303	E 6	7345	B 4
3304	D 6	7361	M 7
3306	K 9	7363	N 7
3309	D 7	7364	L 9
3310	C 8	7365	M 9
3311	B 6	7383	N 9
3312	B 8	7391	L 5
3313	G 9	7402	J11
3314	D10	7411	G 5
3315	B 7	7530	L15
3316	B 7	7533	M16
3331	I 5	7534	L16
3332	I 5	7536	N12
3333	I 6	7537	K15
3334	H 6	7538	J12
3338	H 7	9301	D 4
3340	G 8	9301	O 3
3341	G 6	9303	D 9
3342	G 8	9304	B 5
3343	I 9	9305	B 5
3344	D10	9306	C 5
3345	B 4	9307	N 8
3361	N 4	9308	J 5
3362	N 5	9309	O 3
3363	I11	9530	L17
3364	I11		
3368	M 7		
3370	L 8		
3371	L 6		
3372	L 8		
3373	L 9		
3374	D10		
3375	L 7		
3376	L 7		
3382	O 9		
3383	L 4		
3384	L 4		
3385	L 6		
3391	L 6		
3392	J12		
3395	J12		
3396	G 7		
3397	G 7		
3398	I13		
3411	F 4		
3412	G 4		
3413	F 5		
3414	G 5		
3415	F 5		
3421	J 5		
3424	J 4		
3431	D 3		
3432	A 5		
3433	E12		
3434	E12		
3435	F11		
3436	F12		
3442	M 6		
3443	N 6		
3446	M 4		
3447	I11		
3448	I10		
3449	K10		
3455	B 4		
3456	B 5		
3457	N10		
3512	N18		
3518	N18		
3520	M18		
3521	M17		
3522	M16		
3524	M14		
3525	M14		
3526	L13		
3527	L13		
3528	L15		
3529	M15		
3530	K15		
3531	K17		
3532	K17		
3533	L14		
3534	L18		
3535	L13		
3571	K13		
3572	J13		
3575	N12		
3576	N13		
3578	K14		

1005 PICTURE TUBE MODULE


F
E
D
C
B
A
6
5
4
3
2
1
TP51
TP52
TP53
R
F
F
B
G2
G
G1
+190A
+190V
TV
07192
C13
C81
C82
C92
C40

2301	C2	3372	B4	3575	C1	C13	E6
2331	D2	3373	B3	3576	C1	C32	A2
2344	E1	3374	B6	3578	A3	C40	D1
2361	C2	3375	B3	3580	D1	C69	C2
2391	E5	3376	B3	4301	C1	C80	C5
2392	E4	3382	E1	4303	A1	C81	A6
2393	C1	3383	F5	5401	E6	C82	B5
2398	E1	3384	E5	6301	C4		
2411	E3	3385	E4	6302	E4		
2412	D2	3391	E5	6303	E5		
2421	E2	3392	C1	6331	D4		
2431	E4	3395	D1	6345	C1		
2432	E4	3396	D3	6361	B4		
2433	B6	3397	D3	6382	D1		
2434	B5	3398	E1	6383	E1		
2520	B1	3411	F2	6411	E3		
2521	A5	3412	E3	6421	C1		
2522	A2	3413	E2	6422	E2		
2523	A3	3414	E2	6423	E3		
2526	A6	3415	E2	6518	B1		
2531	A3	3421	F2	6519	B1		
2532	A4	3424	E1	6520	A4		
2533	A2	3431	E5	7302	D3		
2534	A5	3432	B2	7303	D2		
3301	C2	3433	E6	7304	D4		
3302	C2	3434	B6	7305	D4		
3303	C2	3435	B6	7331	E2		
3304	C3	3436	B6	7333	D2		
3305	B5	3442	B2	7334	E4		
3306	E4	3443	C2	7335	E3		
3309	D2	3446	E4	7345	C1		
3310	C3	3447	E1	7361	B2		
3311	C3	3448	E1	7363	B2		
3312	C4	3449	F1	7364	B4		
3313	C3	3455	C1	7365	B3		
3314	D6	3456	C1	7383	F1		
3315	C3	3457	E1	7391	E4		
3316	C3	3512	B1	7402	D1		
3331	D2	3518	B1	7411	E2		
3332	D2	3520	A2	7530	A4		
3333	D2	3521	B1	7533	A5		
3334	D2	3522	A1	7534	A5		
3338	E2	3524	A1	7536	C1		
3340	D3	3525	A1	7537	A3		
3341	D3	3526	B5	7538	D1		
3342	D4	3527	A5	9301	B4		
3343	E3	3528	A5	9302	B4		
3344	D5	3529	A4	9303	D4		
3345	C1	3530	A2	9304	B3		
3361	C1	3531	A4	9305	D2		
3362	C2	3532	A4	9306	E2		
3363	E1	3533	A5	9307	C2		
3364	E1	3534	A3	9308	D2		
3368	B2	3535	A5	9309	E1		
3370	B3	3571	D1	9520	A1		
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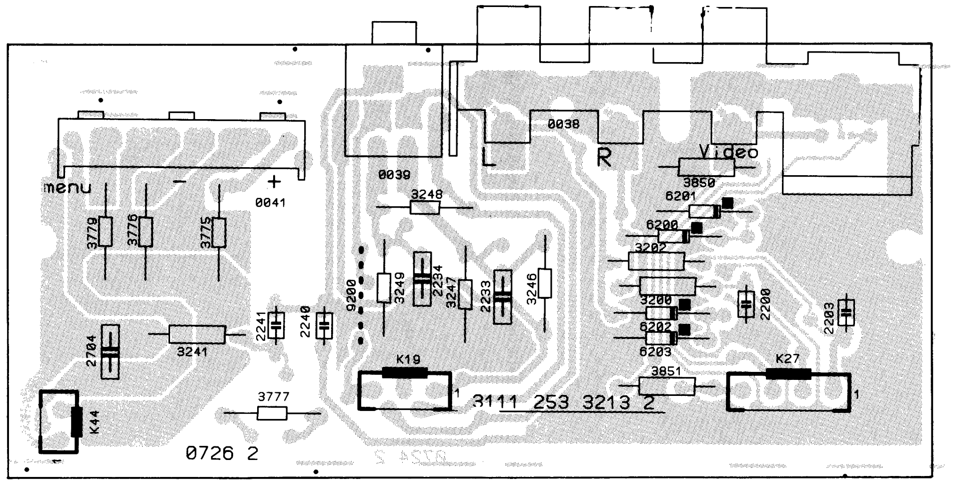
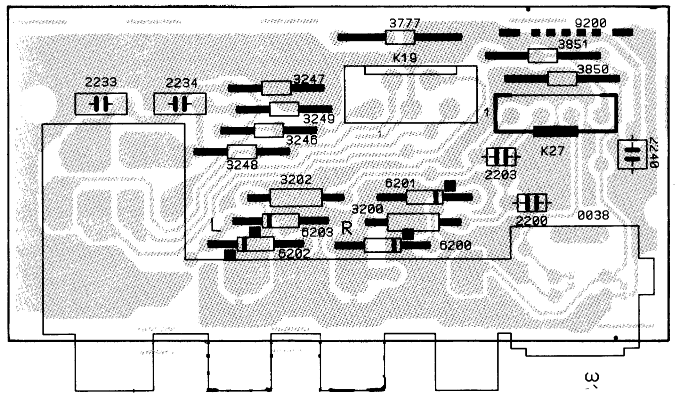
1060 SEPARATE CONTROL MODULE


menu
-
+
0041
0039
0038
L
R
Video
3850
6201
6200
3202
3200
6202
6203
3851
3248
3779
3776
3775
9200
3249
2234
3247
2233
3246
2200
2203
2241
2240
2704
3241
K19
K27
K44
3777
3111 253 3213 2
0726 2

1060 SEPARATE CONTROL MODULE 29"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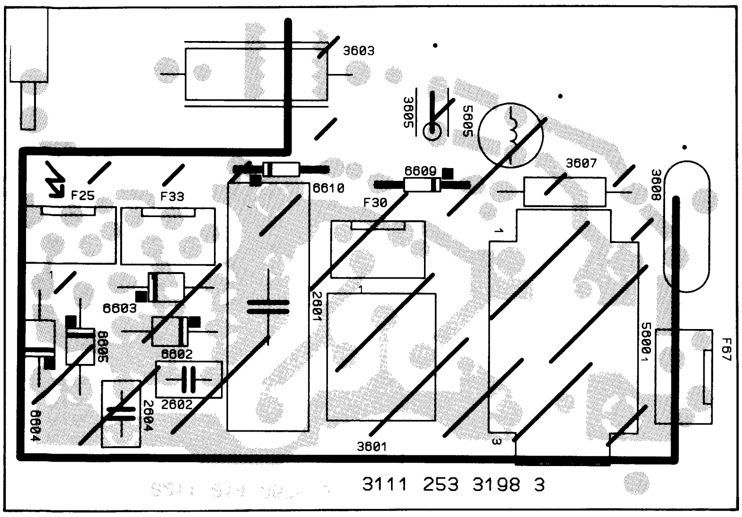
3851
3850
2233
2234
3247
3249
3246
3248
K27
2203
2247
3202
6201
3200
L
R
6203
6202
6200
2200
0038

1002 MAINS FILTER MODULE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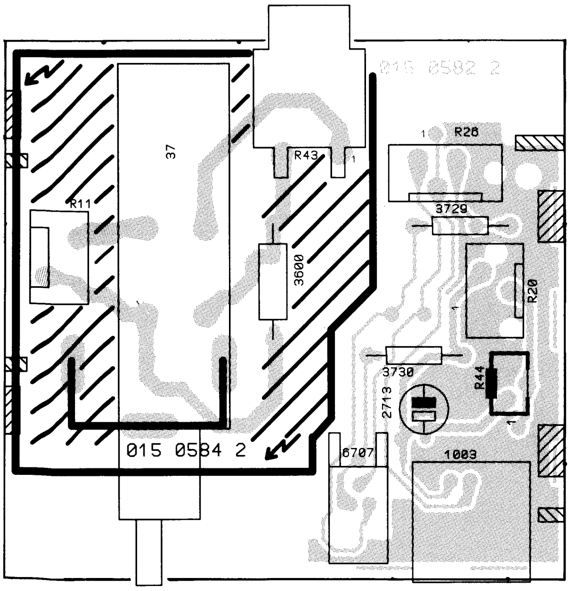
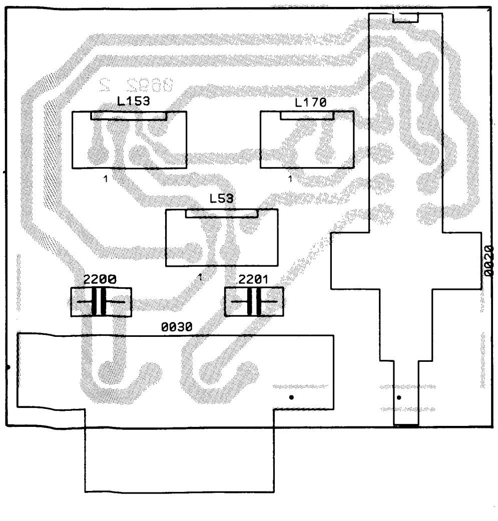
3605
5605
3607
3608
6609
6610
F25
F33
F30
6603
6605
6602
6604
2604
2602
2601
3601
5601
F67
3111 253 3198 3

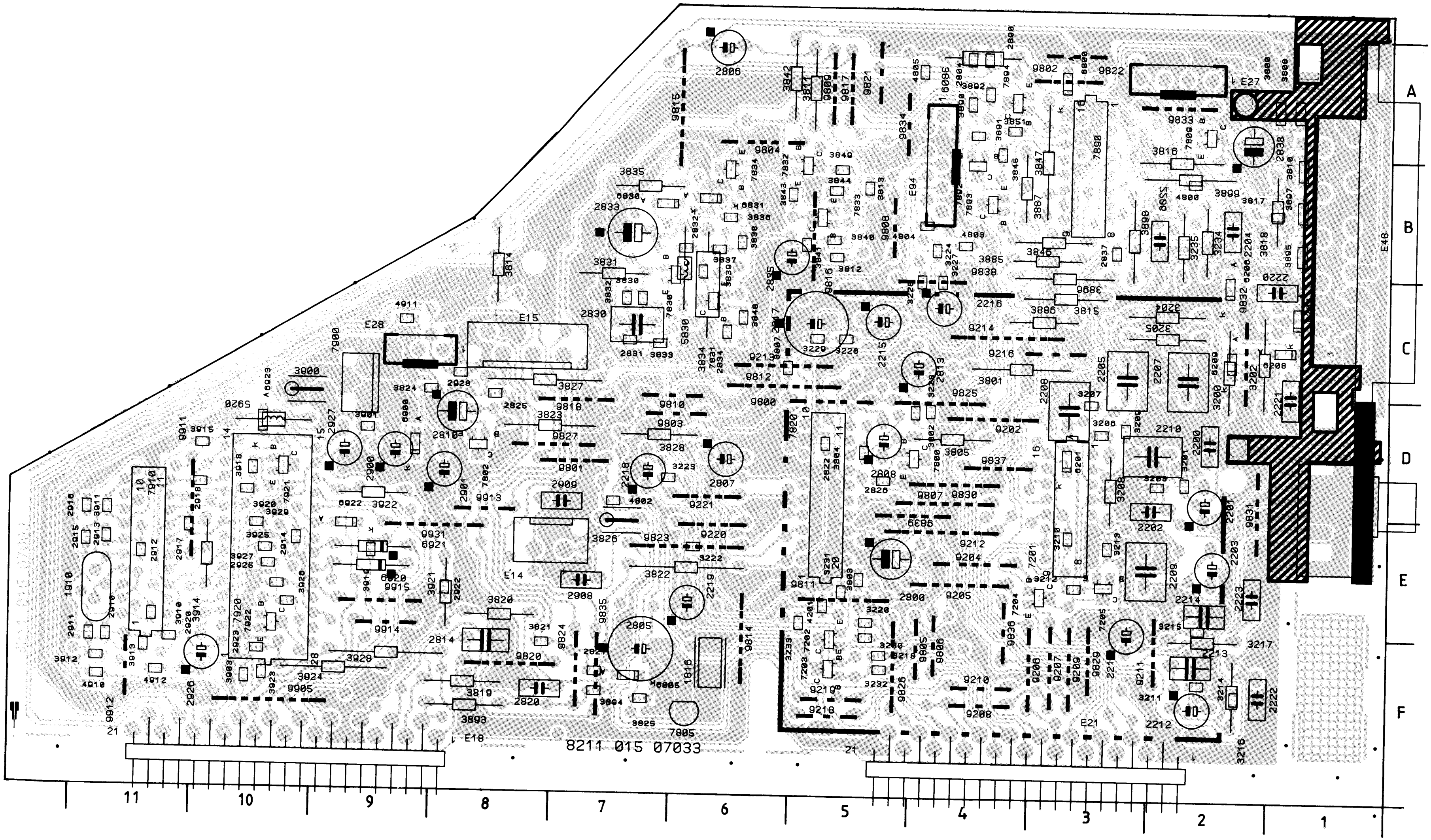
1050 SEPARATE MAINS MODULE


37
R11
R43
3600
R28
3729
R20
3730
2713
R44
6707
1003
015 0584 2

1040 EXTERNAL LOUDSPEAKER MODULE

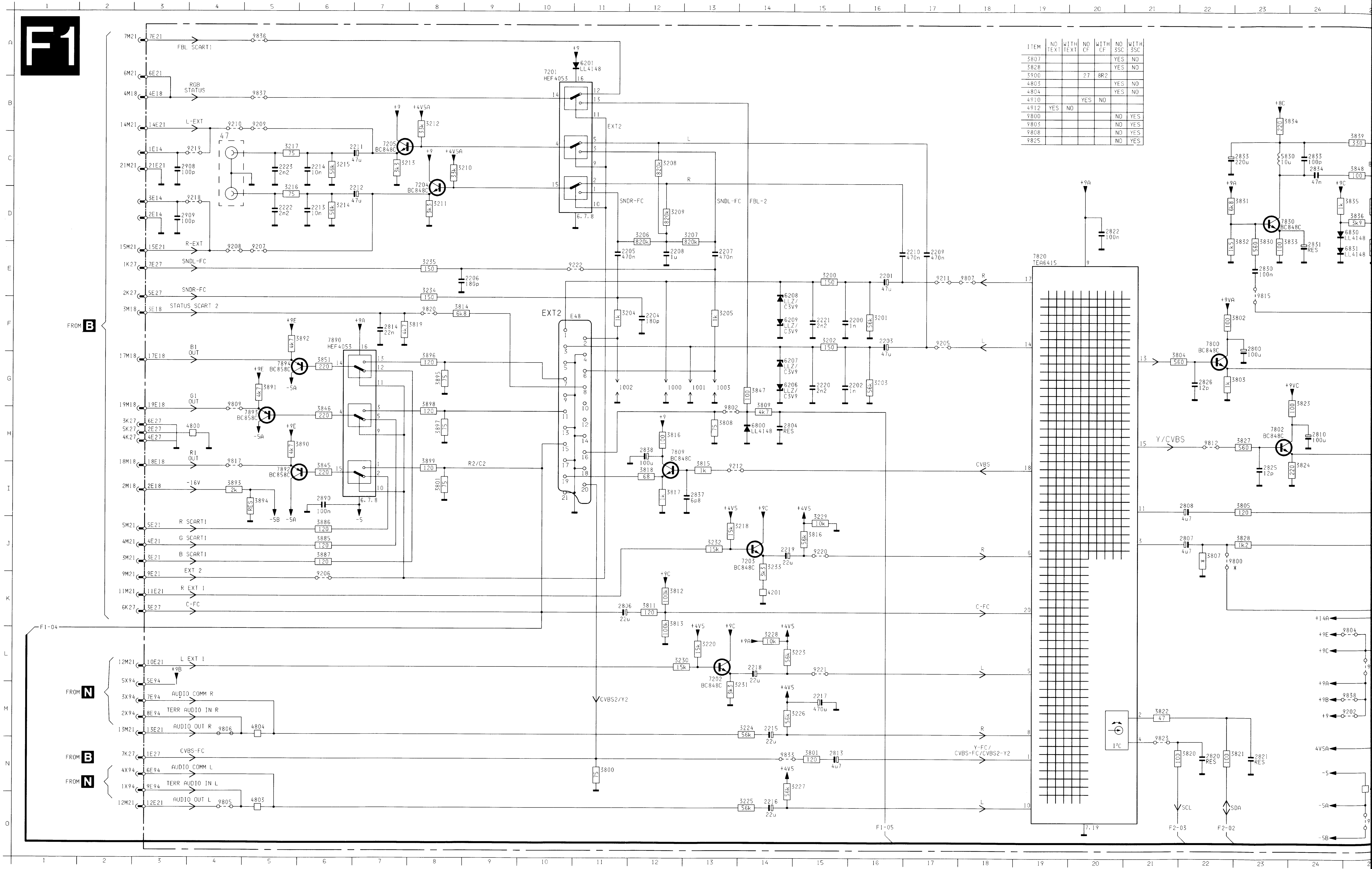

L153
L170
L53
2200
2201
0030
0020

1003 TELETEXT MODULE 4/3

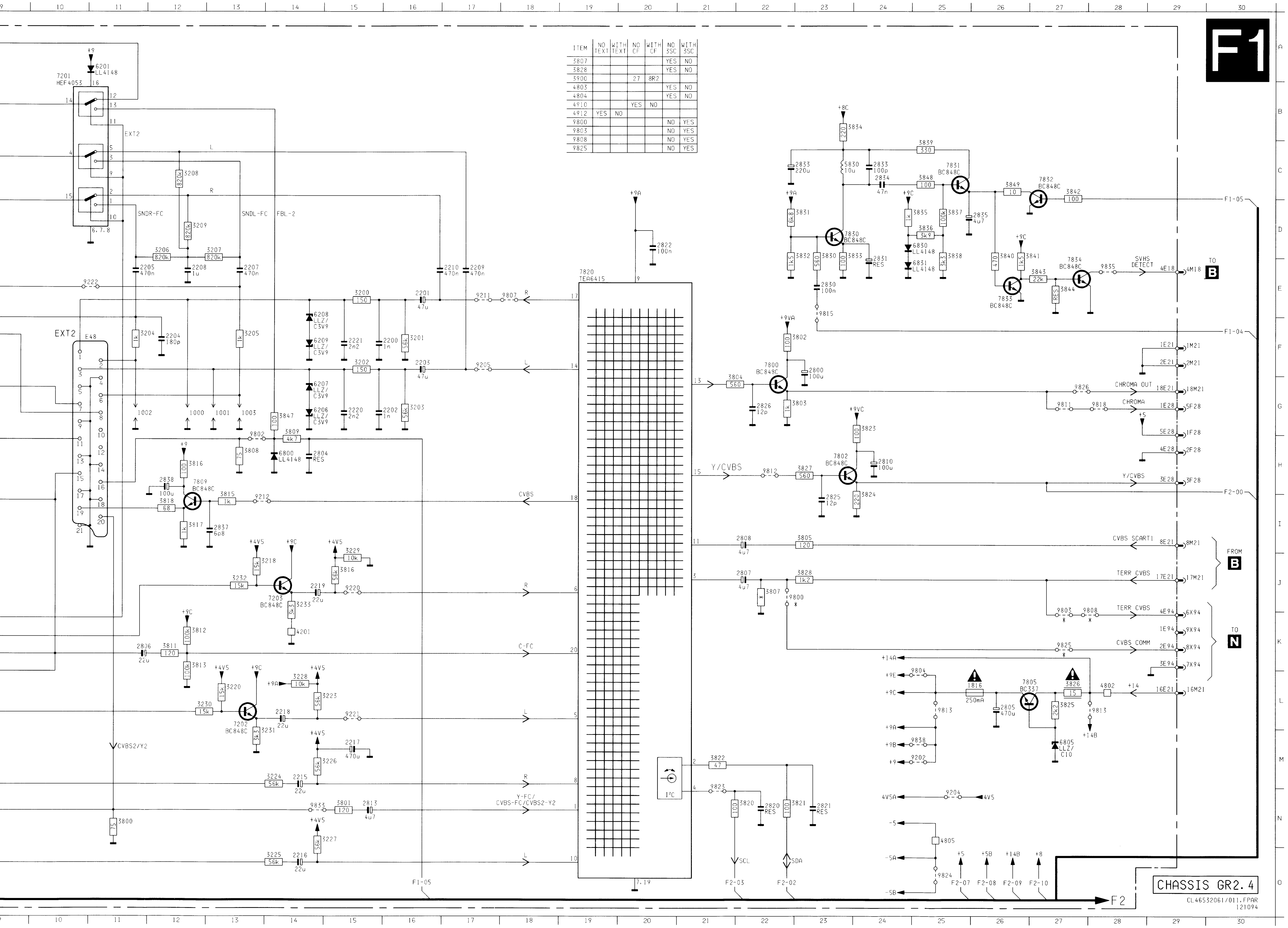


1000	C1
1001	C1
1002	C1
1003	C1
1816	F6
1910	E11
2200	D2
2201	E2
2202	E2
2203	E2
2204	B2
2205	D3
2206	B2
2207	D2
2208	D3
2209	E2
2210	D2
2211	F3
2212	F2
2213	F2
2214	F2
2215	C5
2216	C4
2217	C5
2218	D7
2219	F6
2220	C1
2221	D1
2222	F1
2223	E1
2800	E5
2804	A4
2805	F7
2807	D6
2808	D5
2810	D8
2813	D4
2814	F8
2820	F7
2821	F7
2822	D5
2825	D8
2826	D5
2830	C7
2831	C7
2832	C6
2833	B7
2834	C6
2835	C5
2837	C3
2838	B2
2890	A4
2900	D9
2901	D8
2908	E7
2909	E7
2910	F11
2911	F11
2912	E11
2913	E11
2914	E9
2915	E11
2916	E11
2917	E10
2918	E10
2920	F11
2922	E8
2923	F10
2925	E10
2926	F10
2927	D9
2928	D8
3200	C2
3201	D2
3202	C1
3203	D2
3204	C2
3205	C2
3206	D3
3207	D3
3208	E3
3209	D3
3210	E3
3211	F2
3212	E3
3213	E3
3214	F2
3215	F2
3216	F2
3217	F2
3218	F5
3220	F5
3222	E6
3223	D6
3224	C4
3225	C4
3226	C5
3227	C4
3228	D4
3229	C5
3230	F5
3231	E5
3232	F5
3233	F5
3234	B2
3235	B2
3800	A1
3801	C3
3802	D4
3803	E5
3804	D5
3805	D4
3807	D5
3808	A1
3809	A4
3810	B1
3811	A5
3812	C5
3813	B5
3814	C8
3815	C3
3816	B2
3817	B1
3818	B1
3819	F8
3820	F8
3821	F7
3822	E6
3823	D7
3824	D8
3825	F7
3826	E7
3827	D7
3828	D6
3830	C7
3831	C7
3832	C7
3833	C6
3834	C6
3835	B7
3836	B6
3837	C6
3838	B6
3839	C6
3840	B5
3841	C5
3842	A5
3843	B5
3844	B5
3845	B4
3846	B3
3847	B3
3848	C6
3849	B5
3851	B4
3885	C3
3886	C3
3887	B3
3890	A4
3891	B4
3892	A4
3893	F8
3894	F7
3895	C1
3896	C3
3897	B1
3898	B3
3899	B2
3900	D9
3901	D9
3903	F10
3910	F11
3911	E11
3912	F11
3913	F11
3914	E10
3915	D10
3918	D10
3919	E9
3920	E10
3921	E8
3922	E9
3923	F10
3924	F9
3925	E10
3926	F10
3927	E10
3928	F9
3929	E10
4201	F5
4800	B2
4802	E7
4803	B4
4804	B4
4805	A4
4910	F11
4911	C9
4912	F11
5830	C6
5920	D10
6201	D3
6206	C2
6207	C1
6208	C1
6209	C2
6800	A3
6805	F7
6830	B6
6831	B6
6900	D8
6920	E9
6921	E9
6922	E9
6923	D10
7201	E3
7202	F5
7203	F5
7204	E3
7205	E3
7800	D4
7802	D8
7805	F6
7809	B2
7820	E5
7830	C6
7831	C6
7832	B5
7833	B5
7834	B6
7890	B3
7892	B4
7893	B4
7894	A3
7900	D9
7910	E11
7920	E10
7921	D10
7922	F10
9202	D4
9204	E4
9205	E4
9206	F3
9207	F3
9208	F4
9209	F3
9210	F4
9211	F2
9212	E4
9213	D5
9214	C4
9216	C3
9218	F5
9219	F5
9220	E6
9221	E6
9800	D5
9801	D7
9802	A3
9803	D6
9804	B6
9805	F4
9806	F4
9807	E4
9808	B5
9809	A5
9810	D6
9811	E5
9812	D5
9814	F6
9815	A6
9816	B5
9817	A5
9818	D7
9820	F8
9821	A5
9822	A3
9823	E6
9824	F7
9825	D4
9826	F4
9827	D7
9829	F3
9830	D4
9831	E1
9832	C2
9833	A2
9834	A4
9835	F7
9836	F4
9837	D4
9838	C4
9839	E4
9905	F10
9911	E10
9912	F11
9913	E8
9914	F9
9915	F9
9931	E8
E14	E7
E15	C8
E18	G10
E21	G3
E27	A2
E28	C8
E48	C1
E94	B4

Teletext/Videotext/Télétexte

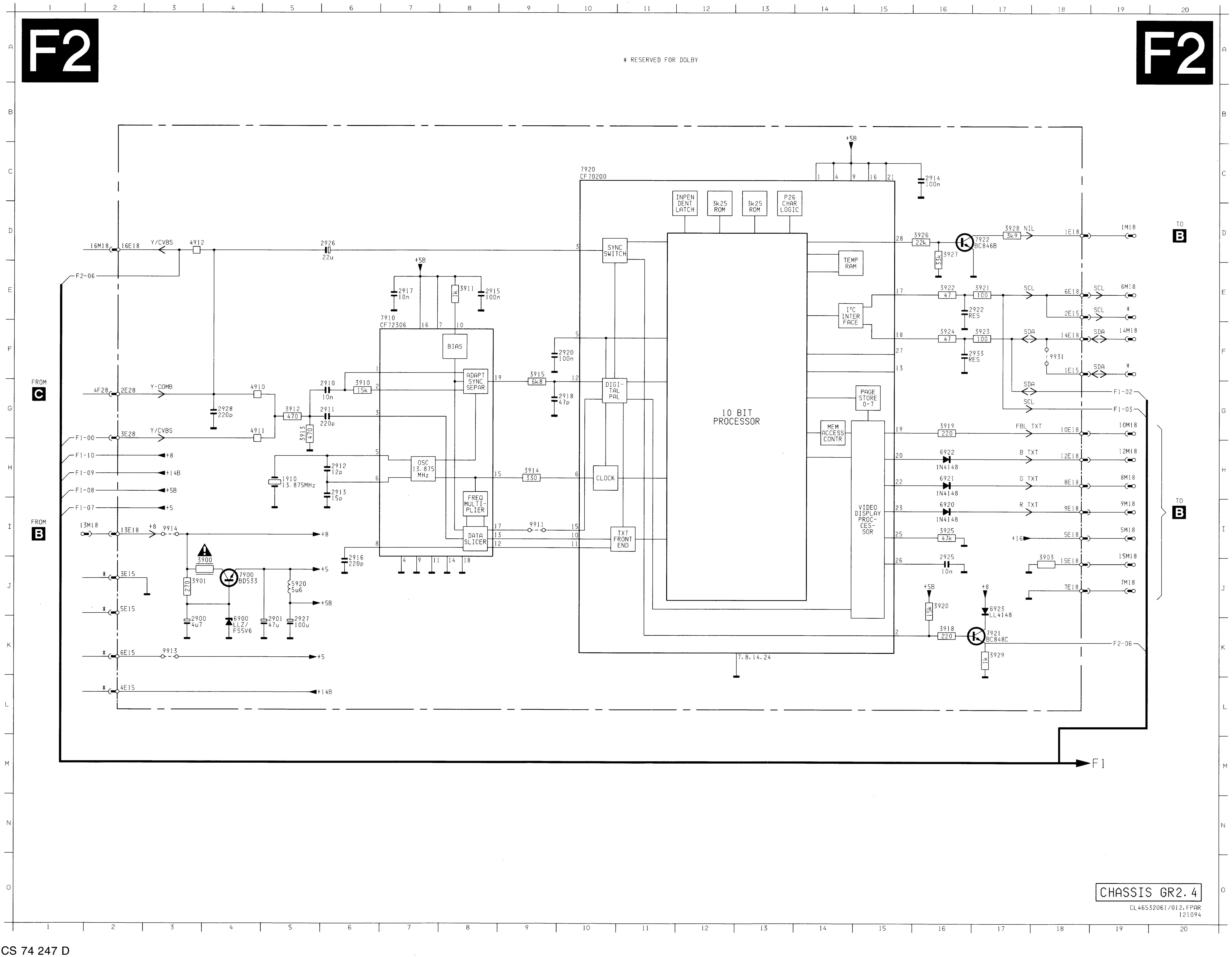

F1
FROM B
FROM N
FROM B
FROM N
7M21 7E21 FBL SCART1 9836
6M21 6E21
4M18 4E18 RGB STATUS 9837
14M21 14E21 L-EXT 9210 9209
1E14 9219
21M21 21E21 2908 100p
3E14 9218
2E14 2909 100p
15M21 15E21 R-EXT 9208 9207
1K27 7E27 SNDL-FC 3235 150 9222
2K27 5E27 SNDR-FC 3234 150
3M18 3E18 STATUS SCART 2 9820 3814 6k8
17M18 17E18 B1 OUT
19M18 19E18 G1 OUT
3K27 6E27
5K27 2E27
4K27 4E27 4800
18M18 18E18 R1 OUT 9817
2M18 2E18 -16V 3893 2k 3894 RES
5M21 5E21 R SCART1 3886 120
4M21 4E21 G SCART1 3885 120
3M21 3E21 B SCART1 3887 120
9M21 9E21 EXT 2 9206
11M21 11E21 R EXT 1
6K27 3E27 C-FC
F1-04
12M21 10E21 L EXT 1
5X94 5E94 +9B
3X94 7E94 AUDIO COMM R
2X94 8E94 TERR AUDIO IN R
13M21 13E21 AUDIO OUT R 9806 4804
7K27 1E27 CVBS-FC
4X94 6E94 AUDIO COMM L
1X94 9E94 TERR AUDIO IN L
12M21 12E21 AUDIO OUT L 9805 4803
7201 HEF4053
6201 LL4148
EXT2
7205 BC848C
7204 BC848C
3212 33k
3210 33k
3213 3k3
3211 3k3
3217 75
3216 75
2223 2n2
2222 2n2
2214 10n
2213 10n
3215 56k
3214 56k
2211 47u
2212 47u
SNDR-FC
SNDL-FC
FBL-2
3206 820k
3207 820k
3208 820k
3209 820k
2205 470n
2208 1u
2207 470n
2206 180p
3204 1k
2204 180p
3205 1k
1002 1000 1001 1003
EXT2 E48
7890 HEF4053
7894 BC858C
7893 BC858C
7892 BC858C
3892 4k7
3891 4k7
3890 4k7
3851 220
3846 220
3845 220
3896 120
3898 120
3899 120
3895 75
3897 75
3801 75
2814 22n
3819 4k7
2890 100n
R2/C2
6.7.8
-5A -5B -5
+9E +9A +9 +4V5A
3847 100
9802
3809 4k7
3808 75
6800 LL4148
2804 RES
6208 LLZ/C3V9
6209 LLZ/C3V9
6207 LLZ/C3V9
6206 LLZ/C3V9
3200 150
3202 150
2221 2n2
2220 2n2
2200 1n
2202 1n
3201 56k
3203 56k
2201 47u
2203 47u
2210 470n
2209 470n
9211 9807
9205
3816 100
2838 100u
7809 BC848C
3818 68
3815 1k
9212
3817 1k
2837 6p8
CVBS
7203 BC848C
3232 15k
3218 15k
3233 3k3
4201
2219 22u
9220
3229 10k
3816 56k
2806 22u
3811 120
3812 100k
3813 100k
C-FC
7202 BC848C
3230 15k
3220 15k
3231 3k3
3228 10k
3223 56k
2218 22u
9221
2217 470u
3226 56k
3224 56k
2215 22u
CVBS2/Y2
3800 75
9833 3801 120 2813 4u7
3227 56k
3225 56k
2216 22u
Y-FC/CVBS-FC/CVBS2-Y2
F1-05
7820 TEA6415
I²C
2822 100n
+9A
3804 560
7800 BC848C
2826 12p
3803 1k
3802 100
2800 100u
+9VA
Y/CVBS
9812
3827 560
2825 12p
7802 BC848C
3823 100
3824 220
2810 100u
+9VC
2808 4u7
3805 120
2807 4u7
3828 1k2
3807
9800
3822 47
9823
3820 100
2820 RES
3821 100
2821 RES
SCL
SDA
F2-03
F2-02
7.19
3834 220
+8C
5830 10u
2833 220u
2833 100p
2834 47n
3839 330
3848 100
3831 6k8
7830 BC848C
3832 1k5
3830 560
3833 100
2831 RES
3835 1k
3836 3k9
6830 LL4148
6831 LL4148
2830 100n
9815
+14A
+9E 9804
+9C
+9A
+9B 9838
+9 9202
4V5A
-5
-5A
-5B

ITEM	NO TEXT	WITH TEXT	NO CF	WITH CF	NO 3SC	WITH 3SC
3807					YES	NO
3828					YES	NO
3900			27	8R2		
4803					YES	NO
4804					YES	NO
4910			YES	NO		
4912	YES	NO				
9800					NO	YES
9803					NO	YES
9808					NO	YES
9825					NO	YES


F1
7201 HEF4053
EXT2
E48
SNDR-FC
SNDL-FC
FBL-2
7820 TEA6415
I²C
7809 BC848C
7203 BC848C
7202 BC848C
7800 BC848C
7802 BC848C
7805 BC337
7830 BC848C
7831 BC848C
7832 BC848C
7833 BC848C
7834 BC848C
CVBS
CVBS2/Y2
C-FC
Y-FC/ CVBS-FC/CVBS2-Y2
Y/CVBS
SVHS DETECT
CHROMA OUT
CHROMA
CVBS SCART1
TERR CVBS
CVBS COMM
TO B
FROM B
TO N
F1-05
F1-04
F2-00
F2-02
F2-03
F2-07
F2-08
F2-09
F2-10
F2
SCL
SDA
250mA
CHASSIS GR2.4
CL46532061/011.FPAR 121094

ITEM	NO TEXT	WITH TEXT	NO CF	WITH CF	NO 3SC	WITH 3SC
3807					YES	NO
3828					YES	NO
3900			27	8R2		
4803					YES	NO
4804					YES	NO
4910			YES	NO		
4912	YES	NO				
9800					NO	YES
9803					NO	YES
9808					NO	YES
9825					NO	YES

1000	G12	3828	J23
1001	G13	3830	D23
1002	G11	3831	D23
1003	G13	3832	D23
1816	L26	3833	D23
2200	F16	3834	B23
2201	E16	3835	D25
2202	G16	3836	D25
2203	F16	3837	D25
2204	F12	3838	D25
2205	E11	3839	C25
2206	E 9	3840	D26
2207	E13	3841	D26
2208	E12	3842	C27
2209	E17	3843	E27
2210	E17	3844	E27
2211	C 7	3845	I 6
2212	D 7	3846	H 6
2213	D 6	3847	G14
2214	C 6	3848	C25
2215	M14	3849	C26
2216	O14	3851	G 6
2217	M15	3885	J 6
2218	L14	3886	J 6
2219	J14	3887	J 6
2220	G15	3890	H 5
2221	F15	3891	G 5
2222	D 5	3892	F 5
2223	C 5	3893	I 4
2800	F23	3894	I 5
2804	H14	3895	G 8
2805	L26	3896	G 8
2806	K11	3897	H 8
2807	J22	3898	G 8
2808	I22	3899	I 8
2810	H24	4201	K14
2813	N15	47	C 4
2814	F 7	4802	L28
2820	N22	4803	O 5
2821	N23	4804	M 5
2822	D20	4805	N25
2825	I23	5830	C23
2826	G22	6201	A11
2830	E23	6206	G14
2830	E23	6207	G14
2831	E24	6208	F14
2833	C23	6209	F14
2833	C24	6800	H14
2834	C24	6805	M27
2835	D26	6830	D25
2837	I13	6831	E25
2838	H12	7201	A10
2890	I 6	7202	L13
2908	C 3	7203	J14
2909	D 3	7204	D 8
3200	E15	7205	C 7
3201	F16	7800	F22
3202	F15	7802	H23
3203	G16	7805	L26
3204	F11	7809	H12
3205	F13	7820	E19
3206	D12	7830	D23
3207	D13	7831	C25
3208	C12	7832	C27
3209	D12	7833	E26
3210	C 8	7834	E27
3211	D 8	7890	F 6
3212	B 8	7892	I 5
3213	C 7	7893	H 5
3214	D 6	7894	G 5
3215	C 6	9202	M25
3216	D 5	9204	N25
3217	C 5	9205	F17
3218	J13	9206	K 6
3220	L13	9207	E 5
3223	L14	9208	E 4
3224	M14	9209	B 5
3225	O14	9210	B 4
3226	M14	9211	E17
3227	N14	9212	I13
3228	L14	9218	D 4
3229	J15	9219	C 4
3230	L12	9220	J15
3231	L13	9221	L15
3232	J13	9222	E11
3233	J14	9800	J22
3234	E 8	9802	H13
3235	E 8	9803	K27
3800	N11	9804	L25
3801	I 8	9805	O 4
3801	N15	9806	M 4
3802	F22	9807	E18
3803	G22	9808	K28
3804	G21	9809	H 4
3805	I23	9811	G27
3807	J22	9812	H22
3808	H13	9813	L25
3809	G14	9813	L28
3811	K12	9815	E23
3812	K12	9817	I 4
3813	K12	9818	G28
3814	F 8	9820	F 8
3815	I13	9823	N21
3816	H12	9824	O25
3816	J15	9825	K27
3817	I12	9826	G27
3818	I12	9833	N14
3819	F 8	9835	E28
3820	N22	9836	A 5
3821	N22	9837	B 5
3822	M21	9838	M25
3823	G24	E48	F11
3824	H24		
3825	L27		
3826	L27		
3827	H23		


F2
* RESERVED FOR DOLBY
7920
CF70200
INPEN DENT LATCH
3k25 ROM
3k25 ROM
P26 CHAR LOGIC
SYNC SWITCH
TEMP RAM
I²C INTER FACE
10 BIT PROCESSOR
DIGI-TAL PAL
CLOCK
TXT FRONT END
PAGE STORE 0-7
MEM ACCESS CONTR
VIDEO DISPLAY PROC-CES-SOR
7910
CF72306
BIAS
ADAPT SYNC SEPAR
OSC 13.875 MHz
FREQ MULTI-PLIER
DATA SLICER
1910
13.875MHz
7922
BC846B
7921
BC848C
7900
BD533
6900
LLZ/F5V6
Y/CVBS
Y-COMB
FROM C
FROM B
TO B
16M18
16E18
4F28
2E28
3E28
13M18
13E18
3E15
5E15
6E15
4E15
F2-06
F1-00
F1-10
F1-09
F1-08
F1-07
F1-02
F1-03
+5B
+8
+14B
+5
SCL
SDA
FBL TXT
B TXT
G TXT
R TXT
1E18
6E18
2E15
14E18
1E15
10E18
12E18
8E18
9E18
5E18
15E18
7E18
1M18
6M18
14M18
10M18
12M18
8M18
9M18
5M18
15M18
7M18
7.8.14.24
F1
CHASSIS GR2.4
CL46532061/012.FPAR
121094

1910	H 5
2900	K 3
2901	K 5
2910	G 6
2911	G 6
2912	H 6
2913	H 6
2914	C16
2915	E 8
2916	J 6
2917	E 7
2918	G 9
2920	F 9
2922	E17
2925	J17
2926	D 6
2927	K 5
2928	G 3
2933	F17
3900	J 4
3901	J 3
3903	J18
3910	G 6
3911	E 8
3912	G 5
3913	G 5
3914	H 9
3915	F 9
3918	K17
3919	G17
3920	J16
3921	E17
3922	E17
3923	F17
3924	F17
3925	I17
3926	D16
3927	D16
3928	D18
3929	K17
4910	G 4
4911	G 4
4912	D 3
5920	J 5
6900	K 4
6920	I17
6921	H17
6922	H17
6923	J17
7900	J 4
7910	F 6
7920	C10
7921	K17
7922	D17
9911	I 9
9913	K 3
9914	I 3
9931	F18

Videotext

Der Videotext-Dekoder ist

Der Videotext-Dekoder ka
verarbeiten:

- World Teletext System
- BBC System: FLOF (F
- Deutsches System: TO

Zur Verkürzung der Warte
Seiten speichern.
Die Speicherkapazität rich

- * WST mit Seiten ohne S
  die zuletzt erhaltene S
- * WST mit Seiten mit Su
  Sub-Seite, folgende +1
  Seite + Inhaltsliste.
- * FLOF: 4 Seiten an die
  gelb, blau), Seite -1, zu
- * TOP: Basis-Top-Tabell
  Gruppen, 2 oder 3 folg

"Page Look Up Table" (PL
Einschalten der 3 Systeme
PLUT sorgt dafür, daß nur
Speicher aufgenommen w

Der Videotext-Schaltkre

- IC 7910: Teletext Data
- IC 7920: Universal Tel

Der Videotext Data-Slic

IC CF 72306 sorgt für:
- Sync.-Trennung
- Videotext-Datenverarb
- Datum Zeit Regenerati
- Übertragung von Zeit,
  zum digitalen Videotex

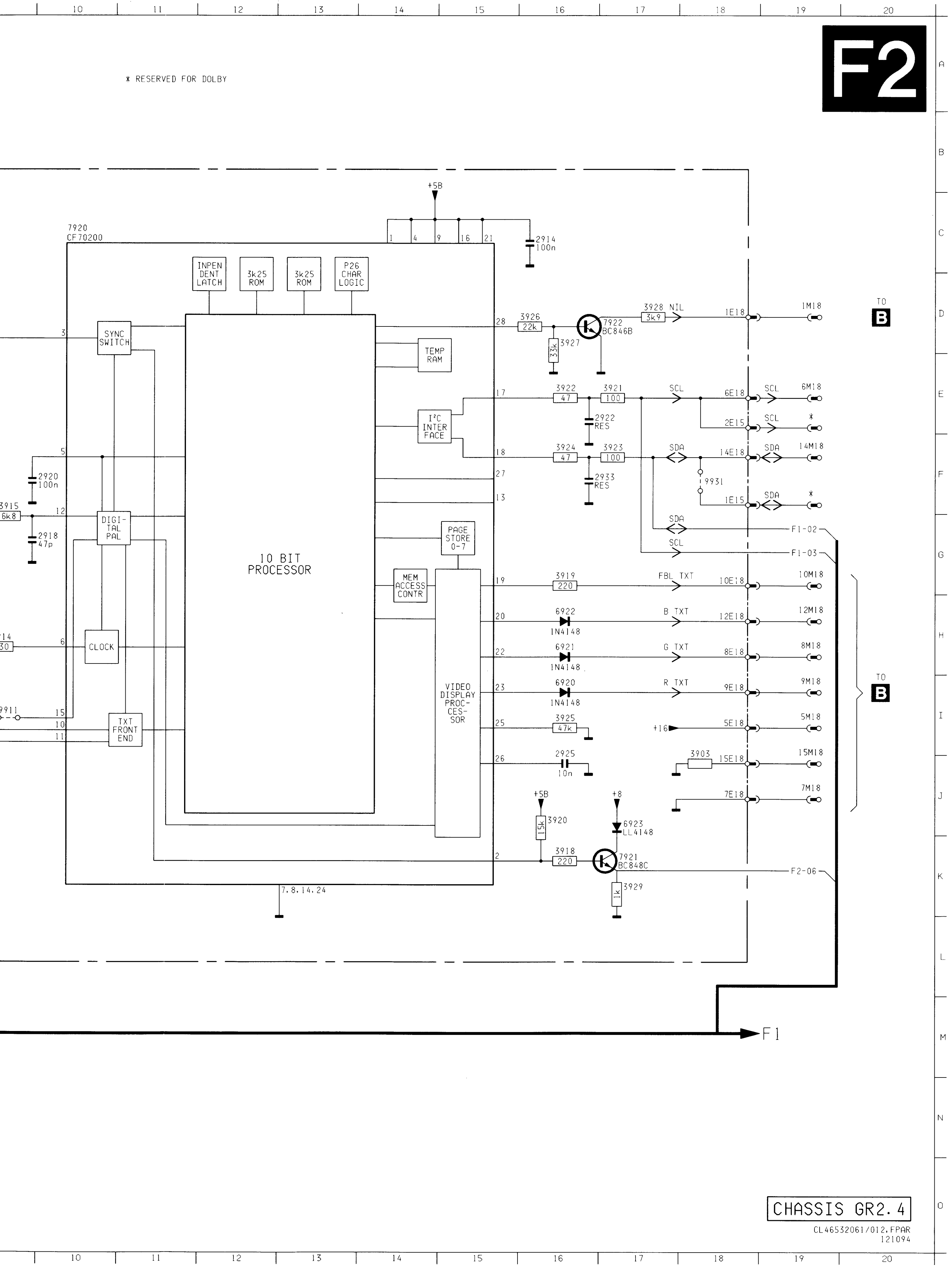
Der Sync.-Separator Slicin
daß er eine Serie von Vide
Signalen verarbeiten kann

Der Data-Slicer arbeitet mi
und Taktphasen Algorithm
Gebiet von Takteinlauf-Am

- Das IC hat 3 Video-Ein
  für die Sync-Verarbeitu
  Videotext-Information
  Widerstand 3910 bilde
  Entfernen der hohen F
  Widerstände R 3912,
  Niveaus von 2V nach

Von der Oszillatorfrequenz
Videotext-Zeitangabe von

Über C2916 wird auf Pin 8
gespeichert.
Um im IC alle Signale vera
"Frequency Multiplier" die


F2
10
11
12
13
14
15
16
17
18
19
20
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
* RESERVED FOR DOLBY
+5B
7920
CF70200
1
4
9
16
21
2914
100n
INPEN DENT LATCH
3k25 ROM
3k25 ROM
P26 CHAR LOGIC
SYNC SWITCH
TEMP RAM
I²C INTER FACE
10 BIT PROCESSOR
PAGE STORE 0-7
MEM ACCESS CONTR
VIDEO DISPLAY PROC-CES-SOR
DIGI-TAL PAL
CLOCK
TXT FRONT END
2920
100n
3915
6k8
2918
47p
28
3926
22k
3927
33k
7922
BC846B
3928 NIL
3k9
1E18
1M18
TO
B
17
3922
47
3921
100
SCL
6E18
SCL
6M18
2922
RES
2E15
SCL
*
18
3924
47
3923
100
SDA
14E18
SDA
14M18
2933
RES
27
13
9931
1E15
SDA
*
SDA
F1-02
SCL
F1-03
19
3919
220
FBL TXT
10E18
10M18
20
6922
1N4148
B TXT
12E18
12M18
22
6921
1N4148
G TXT
8E18
8M18
23
6920
1N4148
R TXT
9E18
9M18
TO
B
25
3925
47k
+16
5E18
5M18
26
2925
10n
3903
15E18
15M18
7E18
7M18
+5B
3920
15k
+8
6923
LL4148
3918
220
7921
BC848C
3929
1k
F2-06
7,8,14,24
2
F1
14
30
3
5
6
12
15
10
11
9911
CHASSIS GR2.4
CL46532061/012.FPAR
121094

1910	H 5
2900	K 3
2901	K 5
2910	G 6
2911	G 6
2912	H 6
2913	H 6
2914	C16
2915	E 8
2916	J 6
2917	E 7
2918	G 9
2920	F 9
2922	E17
2925	J17
2926	D 6
2927	K 5
2928	G 3
2933	F17
3900	J 4
3901	J 3
3903	J18
3910	G 6
3911	E 8
3912	G 5
3913	G 5
3914	H 9
3915	F 9
3918	K17
3919	G17
3920	J16
3921	E17
3922	E17
3923	F17
3924	F17
3925	I17
3926	D16
3927	D16
3928	D18
3929	K17
4910	G 4
4911	G 4
4912	D 3
5920	J 5
6900	K 4
6920	I17
6921	H17
6922	H17
6923	J17
7900	J 4
7910	F 6
7920	C10
7921	K17
7922	D17
9911	I 9
9913	K 3
9914	I 3
9931	F18

Videotext

Der Videotext-Dekoder ist in das Euro-Modul integriert.

Der Videotext-Dekoder kann die folgenden Systeme verarbeiten:

- World Teletext System (WST)
- BBC System: FLOF (Full Level one Feature)
- Deutsches System: TOP (Table of Pages)

Zur Verkürzung der Wartezeit kann der Videotext-Dekoder 8 Seiten speichern.
Die Speicherkapazität richtet sich nach dem System.

- * WST mit Seiten ohne Sub-Kodes: Seite -1, +1, +2, +3 +4, die zuletzt erhaltene Seite, Inhaltstabelle + gezeigte Seite.
- * WST mit Seiten mit Sub-Kodes: Seite -1, +1, +2, folgende Sub-Seite, folgende +1 Sub-Seite, die zuletzt erhaltene Seite + Inhaltsliste.
- * FLOF: 4 Seiten an die farbigen Tasten verbunden (rot, grün, gelb, blau), Seite -1, zuletzt gezeigte Seite und Inhaltsliste.
- * TOP: Basis-Top-Tabelle, Seite +1, 1 oder 2 folgende Gruppen, 2 oder 3 folgende Blöcke oder Seite +1, +2.

"Page Look Up Table" (PLUT) wird unmittelbar nach dem Einschalten der 3 Systeme aufgebaut.
PLUT sorgt dafür, daß nur die ausgestrahlten Seiten in den Speicher aufgenommen werden.

Der Videotext-Schaltkreis besteht aus 2 ICs:

- IC 7910: Teletext Data Slicer: CF 72306
- IC 7920: Universal Teletext-Dekoder: "Eurotext": CF 70200.

Der Videotext Data-Slicer: CF 72306

IC CF 72306 sorgt für:
- Sync.-Trennung
- Videotext-Datenverarbeitung
- Datum Zeit Regeneration
- Übertragung von Zeit, Datum und Doppel-Sync.-Signalen zum digitalen Videotext-Dekoder IC.

Der Sync.-Separator Slicing-Pegel kann angepaßt werden, so daß er eine Serie von Video-Amplituden und gestörten Signalen verarbeiten kann.

Der Data-Slicer arbeitet mit einer anpaßbaren Signalerkennung und Taktphasen Algorithmus, so daß er in einem breiten Gebiet von Takteinlauf-Amplituden arbeiten kann.

- Das IC hat 3 Video-Eingänge (Pin 1, 2, 3). Pin 1, 2 werden für die Sync-Verarbeitung benutzt und mit Pin 3 wird die Videotext-Information aus dem Video geholt.
  Widerstand 3910 bildet LDF mit Kapazität im IC für das Entfernen der hohen Frequenzen auf dem Sync.-Niveau.
  Widerstände R 3912, R 3913 sind eine Anpassung des Niveaus von 2V nach IV pp.

Von der Oszillatorfrequenz 13.875MHZ wird die Videotext-Zeitangabe von 6,937MHz abgeleitet.

Über C2916 wird auf Pin 8 (C REF) das Schwarz-Niveau gespeichert.
Um im IC alle Signale verarbeiten zu können, wird über einen "Frequency Multiplier" die Frequenz auf 69 MHz erhöht.

Das "OSCOUT" (Pin 15) leitet die 13,875 MHz zum Videotext-Dekoder weiter.
Zur Vermeidung von Strahlung in den MF-Teil ist R 3914 vorhanden.
Während des VBi wird über "WIND" der Data-Slicer aktiviert, so daß die Videotext-Daten zu Pin 13 übermittelt werden können.

Das Sync.-Signal (Pin 19) wird über LDF-Filter (R3915, C2918) nach Pin 12 Videotext-Dekoder geschickt.

Universal Videotext Dekoder "Eurotext": CF 70200

Digitales IC zum Dekodieren der Weltstandardsysteme:
- 8 Seiten Speicher
- automatische WST, FLOF oder TOP Detektion
- Programm 26 flackerfreie Schriftverarbeitung

Bei den Eingängen 10, 11, 12 wird den TDATA, T.CIK eine Sync.-Kombination vom Data-Slicer angeboten.
Das IC ist über 16 (Data) und 17 (Zeitgeber) an die I^2C Verbindung angeschlossen.

Über die Markierung 2 (28) wird das NIL-Signal angeboten, um das Flackern des Textes auf dem Bildschirm zu vermeiden.

Die Rückeinschaltung erfolgt über C 2920 auf Pin 5.

Über Dioden 6920, 6921, 6922 werden die RGB-Ausgänge zusammen mit dem Blanking-Signal (Pin 19) zum TDA 4780 geschickt.

Die Dioden verhindern ein "Blooming" des Textes und sorgen auch dafür, daß das OSD-Niveau nicht nach unten gezogen wird.

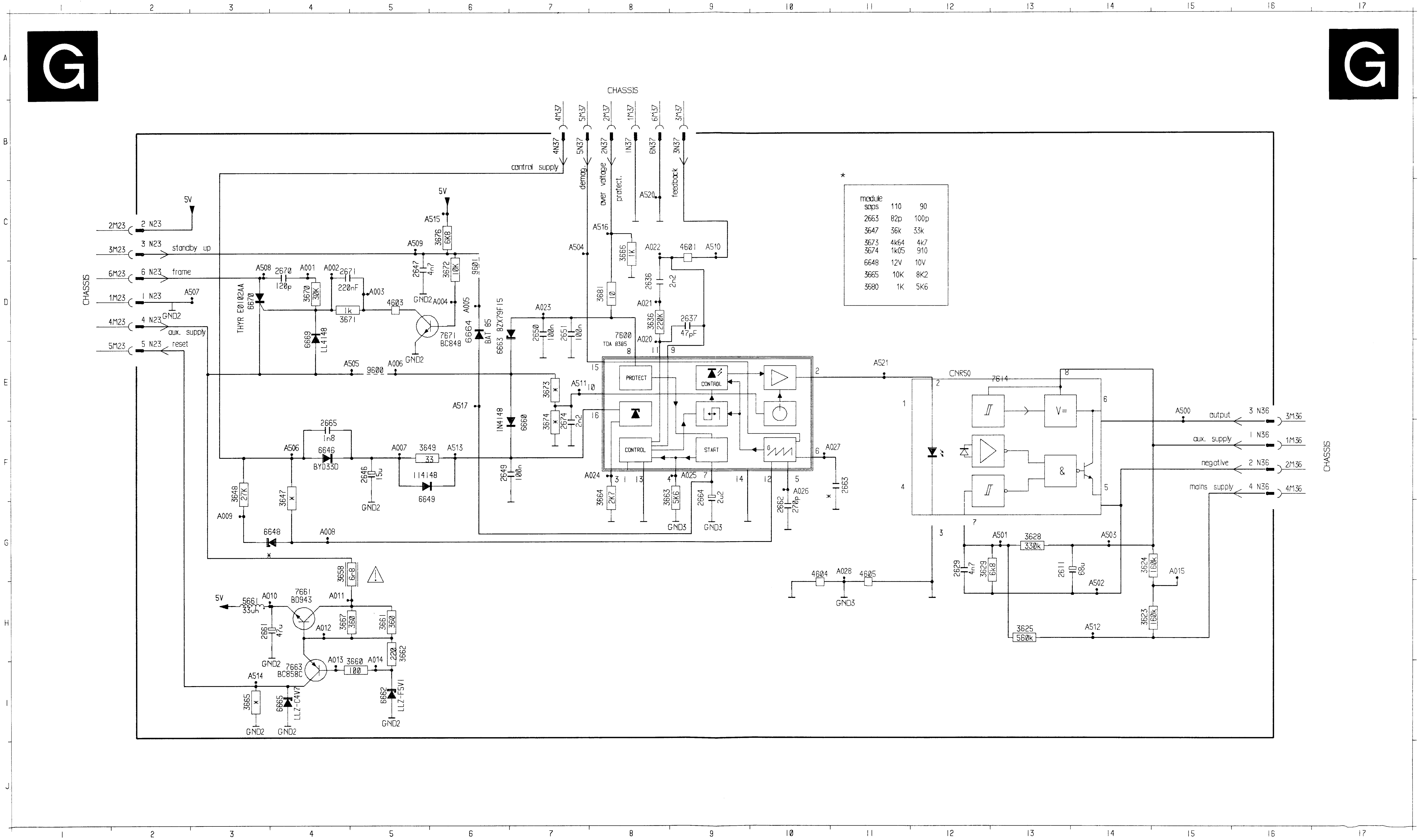
Die Amplitude der Ausgangssignale wird von C 2925 (REF) und R 3925 (RGB Gerät) bestimmt.

Pin 2 (Sync. von CSB) ist der Ausgang des inneren Schalters, der entweder das kombinierte Sync.-Signal des inneren Sync.-Generators, oder den Video-Eingang weiterschaltet, wenn die betreffende Bildinformation gezeigt wird (mixed Modus - Untertitelung).

Über den Zeitgeber von Pin 6 werden 13,875 MHZ vom Data-Slicer empfangen.
Über PLL werden die Impulse des Videotext-Dekoders auf dem Sync. des Videosignals synchronisiert.
Im IC ist ein Charaktergenerator vorhanden.
Das innere ROM verwaltet die Dekodierung und die Anzeigeselektion.
Im inneren RAM können 8 Seiten gespeichert werden.

Sops controle module

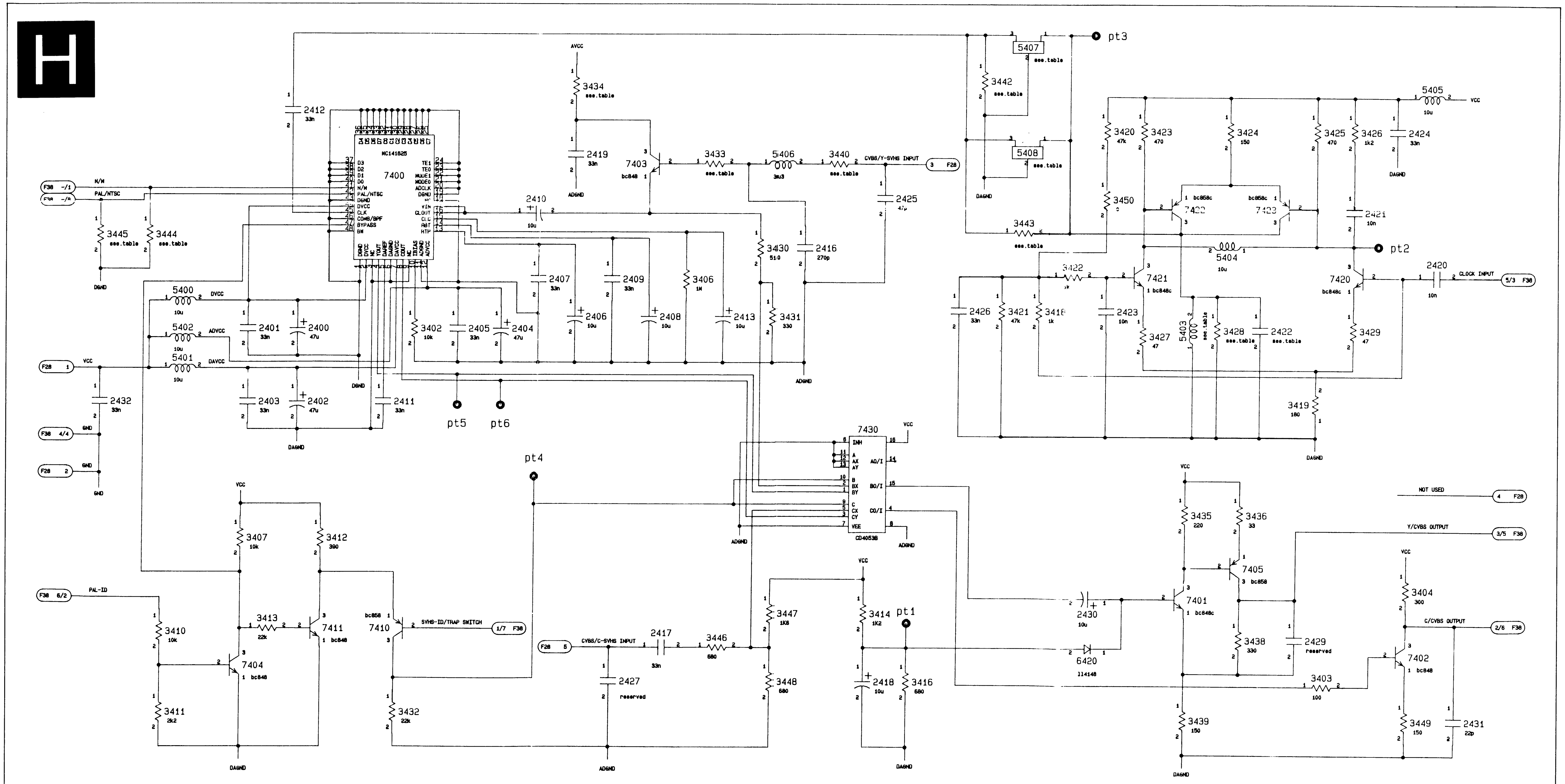
2611	G13
2629	G12
2636	D 8
2637	D 9
2646	F 5
2647	D 5
2649	F 6
2650	D 7
2651	D 7
2661	H 3
2662	G10
2663	F11
2664	F 9
2665	F 4
2670	D 4
2671	D 4
2674	F 7
3623	H14
3624	G14
3625	H13
3628	G13
3629	G12
3636	D 8
3647	F 4
3648	F 3
3649	F 5
3658	G 4
3660	I 5
3661	H 5
3662	H 5
3663	F 8
3664	F 8
3665	I 3
3666	C 8
3667	H 4
3670	D 4
3671	D 4
3672	D 6
3673	E 7
3674	F 7
3676	C 6
3680	I10
3681	D 8
4601	C 9
4603	D 5
4604	G10
4605	G11
5661	H 3
6646	F 4
6648	G 4
6649	G 5
6660	F 7
6662	I 5
6663	E 6
6664	D 6
6665	I 4
6669	D 4
6670	D 3
7600	D 8
7614	E14
7661	H 4
7663	I 4
7671	D 6
9600	E 5
9601	D 6
A001	D 4
A002	D 4
A003	D 5
A004	D 6
A005	D 6
A006	E 5
A007	F 5
A008	G 4
A009	G 3
A010	H 3
A011	H 4
A012	H 4
A013	I 4
A014	I 5
A015	G15
A020	E 8
A021	D 8
A022	C 8
A023	D 7
A024	F 8
A025	F 9
A026	F10
A027	F11
A028	G11
A500	E15
A501	G13
A502	H14
A503	G14
A504	C 7
A505	E 5
A506	F 4
A507	D 3
A508	D 3
A509	C 5
A510	C 9
A511	E 7
A512	H14
A513	F 6
A514	I 3
A515	C 6
A516	C 8
A517	E 6
A518	I10
A519	I10
A520	C 8
A521	E11
N23	D 2
N23	C 2
N23	C 2
N23	D 2
N23	E 2
N23	D 2
N36	F16
N36	F16
N36	E16
N36	F16
N37	B 8
N37	B 8
N37	B 9
N37	B 7
N37	B 7
N37	B 8


G
G
CHASSIS
4M37
5M37
2M37
1M37
6M37
3M37
4N37
5N37
2N37
1N37
6N37
3N37
control supply
demag.
over voltage
protect.
feedback
A520
A516
A504
3666 1K
A022
4601
A510
2636 2n2
3681 10
A021
3636 220K
2637 47pF
A023
2650 100n
2651 100n
7600 TDA 8385
A020
PROTECT
CONTROL
START
A521
CNR50
7614
V=
&
A500
output
aux. supply
negative
mains supply
3 N36
1 N36
2 N36
4 N36
3M36
1M36
2M36
4M36
5V
2M23
3M23
6M23
1M23
4M23
5M23
2 N23
3 N23
6 N23
1 N23
4 N23
5 N23
standby up
frame
aux. supply
reset
GND2
A507
A508
2670 120p
A001
A002
2671 220nF
A003
3670 30K
3671 1k
THYR E0102AA 6670
6669 LL4148
A515
3676 6K8
A509
2647 4n7
3672 10K
9601
4603
A004
7671 BC848
6664 BAT 85
6663 BZX79F15
A005
A505
9600
A006
A517
A511
3673
3674
2674 2n2
6660 1N4148
2649 100n
2665 1n8
A506
6646 BYD33D
A007
3649 33
A513
2646 15u
1N4148
6649
3648 27K
3647
A009
6648
A008
A024
3664 2K7
3663 5K6
A025
2664 2u2
GND3
2662 270p
A026
A027
2663
4604
A028
4605
A501
3628 330k
A503
2629 4n7
3629 6K8
2611 68u
A502
3624 160k
A015
3623 160k
3625 560k
A512
3658 6R8
5V
5661 33uH
A010
7661 BD943
A011
2661 47u
A012
3667 360
3661 360
7663 BC858C
A013
3660 100
A014
3662 220
A514
3665
6665 LLZ-C4V7
6662 LLZ-F5V1
GND2

*

module sops	110	90
2663	82p	100p
3647	36k	33k
3673	4k64	4k7
3674	1k05	910
6648	12V	10V
3665	10K	8K2
3680	1K	5K6

Comb filter module


H
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MC141625
7430
CD4053B
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bc848
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7410
bc858
7411
7401
7402
7405
7420
7421
7422
7423
bc858c
bc848c
3434
see.table
3433
3440
5406
3u3
5407
5408
3442
3443
3444
3445
3428
3422
5403
2422
5405
5404
5400
5401
5402
DVCC
ADVCC
DAVCC
AVCC
VCC
DGND
ADGND
DAGND
GND
N/M
PAL/NTSC
PAL-ID
SVHS-ID/TRAP SWITCH
CVBS/Y-SVHS INPUT
CVBS/C-SVHS INPUT
CLOCK INPUT
Y/CVBS OUTPUT
C/CVBS OUTPUT
NOT USED
F38
F28
pt1
pt2
pt3
pt4
pt5
pt6
2412
2419
2410
2425
2416
2407
2409
2406
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3406
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3402
3407
3412
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3410
3411
3432
3446
3447
3448
3414
3416
3420
3423
3424
3425
3426
3450
3421
3418
3427
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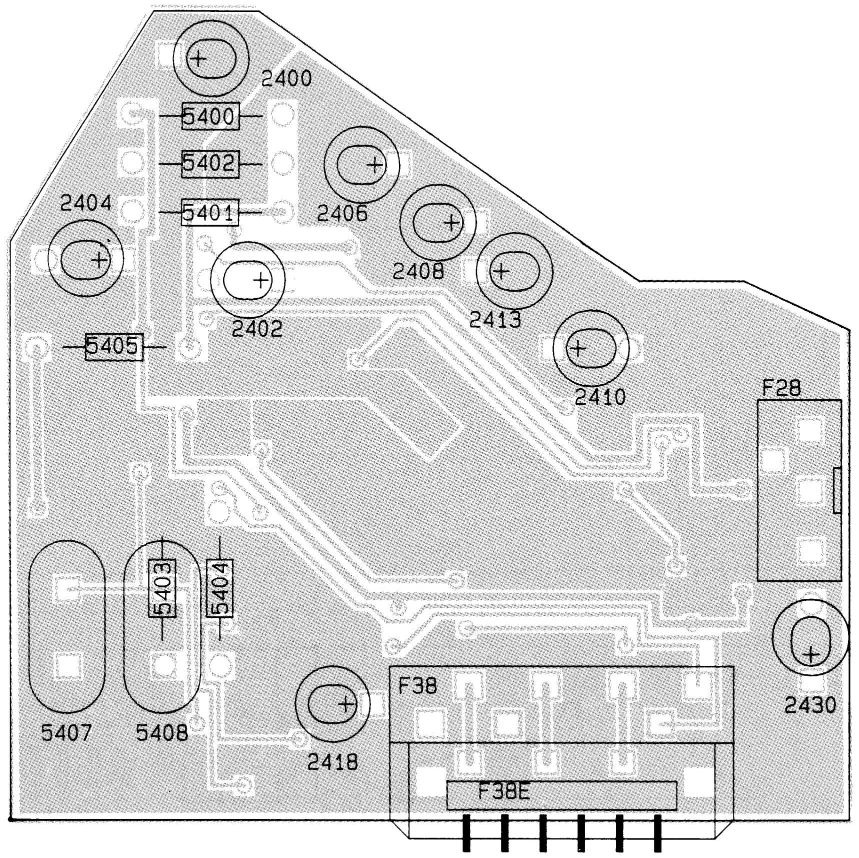
3419
3435
3436
3438
3439
3403
3404
3449
6420
1n4148
reserved

COMPONENTS

	2422	3428	5403	3443	3442	5407	5408	3444	3445	3440	3433	3434
STANDARD VERSION :	100p	820	0.68u	0	-	-	-	0	0	100	220	220
OVERSEAS VERSION :	-	240	-	-	-	SFE14-3	SFE17-7	-	-	120	47	0

CONNECTOR F38	12 NC NUMBER
standar ver / overseas ver	
- 6 5 4 3 2 1 -	3111 258 02050
1 2 3 4 5 6 7 8	3111 258 00250

Comb filter module


2400
5400
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5401
2404
2406
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F28
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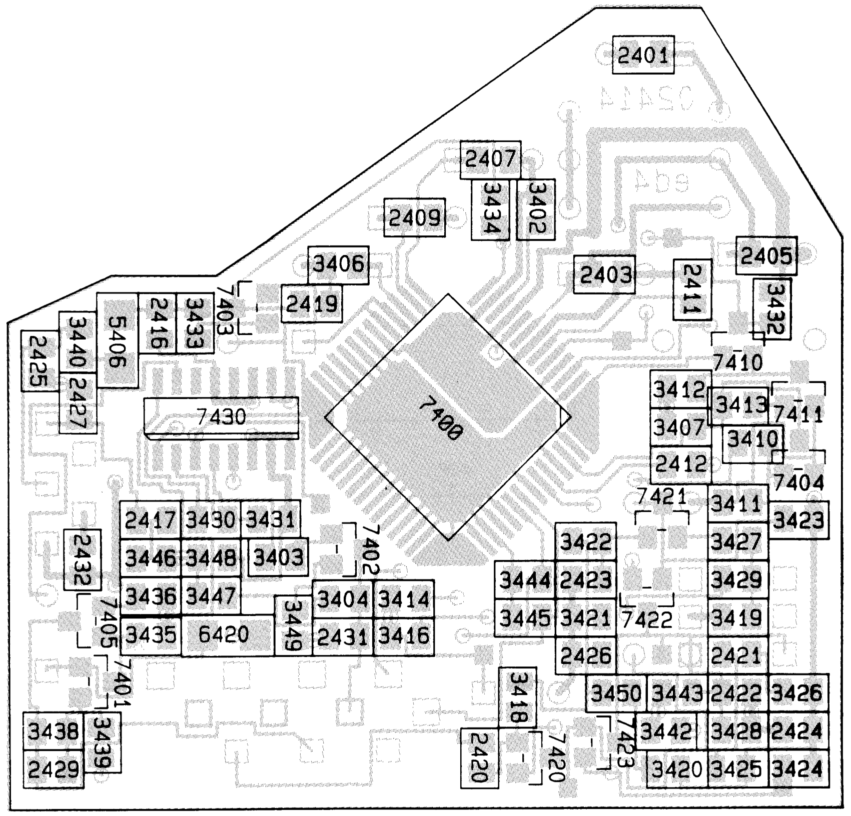
5408
F38
2418
2430
F38E


2401
2407
3434
3402
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3406
2405
2403
2411
3432
2419
7403
3433
2416
5406
3440
2427
2425
7410
7430
7400
3412
3413
7411
3407
3410
2412
7404
7421
3411
3423
2417
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2432
3446
3448
3403
7402
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3436
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3404
3414
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2423
3429
7405
3435
6420
3449
2431
3416
3445
3421
7422
3419
2426
2421
7401
3418
3450
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7423
3442
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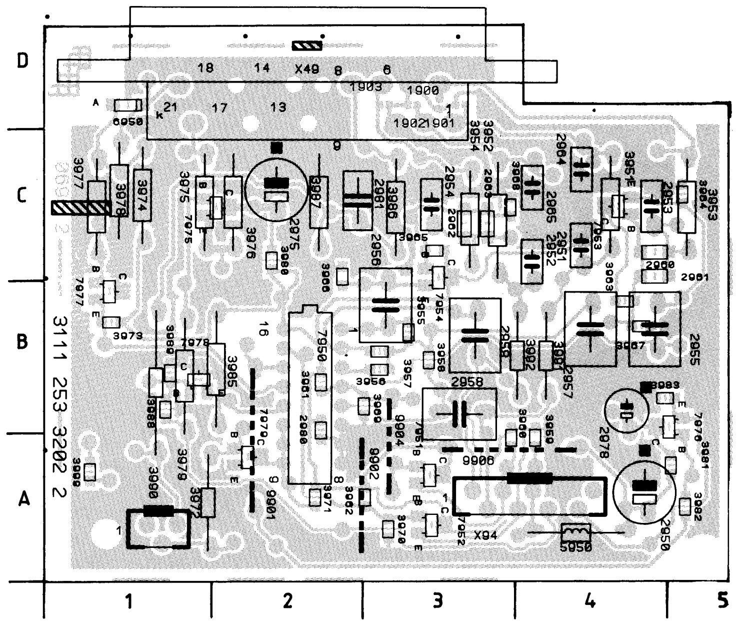
7420
3420
3425
3424

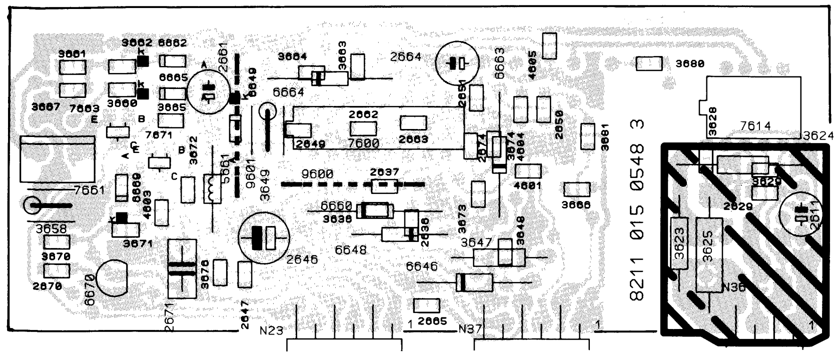
Third scart module 1006


D
C
B
A
1
2
3
4
5
3111 253 3202 2
X49
X94
1900
1901
1902
1903
7950

1900	D3
1901	D3
1902	D3
1903	D3
2950	A4
2951	C4
2952	C4
2953	C5
2954	C3
2955	B5
2956	B3
2957	B4
2958	B3
2959	B3
2960	C5
2961	C5
2962	C3
2963	C3
2964	C4
2965	C4
2975	C2
2978	B4
2980	B2
2981	C3
3951	C4
3952	C3
3953	C5
3954	C3
3955	B3
3956	B3
3957	B3
3958	B3
3959	B4
3960	B4
3961	B2
3962	A3
3963	B4
3964	C5
3965	C3
3966	C2
3967	B4
3968	C4
3969	B3
3970	A3
3971	A2
3972	A2
3973	B1
3974	C1
3975	C2
3976	C2
3977	C1
3978	C1
3979	B1
3980	C2
3981	A5
3982	A5
3983	B5
3985	B2
3986	C3
3987	C2
3988	B1
3989	B1
3990	B1
3991	B4
3992	B4
5950	A4
6950	D1
7950	B2
7951	A3
7952	A3
7953	C4
7954	C3
7975	C2
7976	B5
7977	B1
7978	B2
7979	A2
9901	B2
9902	A3
9904	A3
9906	A4
X31	A1
X49	D3
X94	A4

Sops controle module/Scanning module

SOPS CONTROLE MODULE 1007



3661
3662 6662
3667 7663
3660
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7671
7661
3658
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3671
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2662
2663
2649
7600
9600
2637
6668
3638
2645
6648
6646
2647
2671
2665
3664
3663
3647
3646
4601
3666
3680
7614
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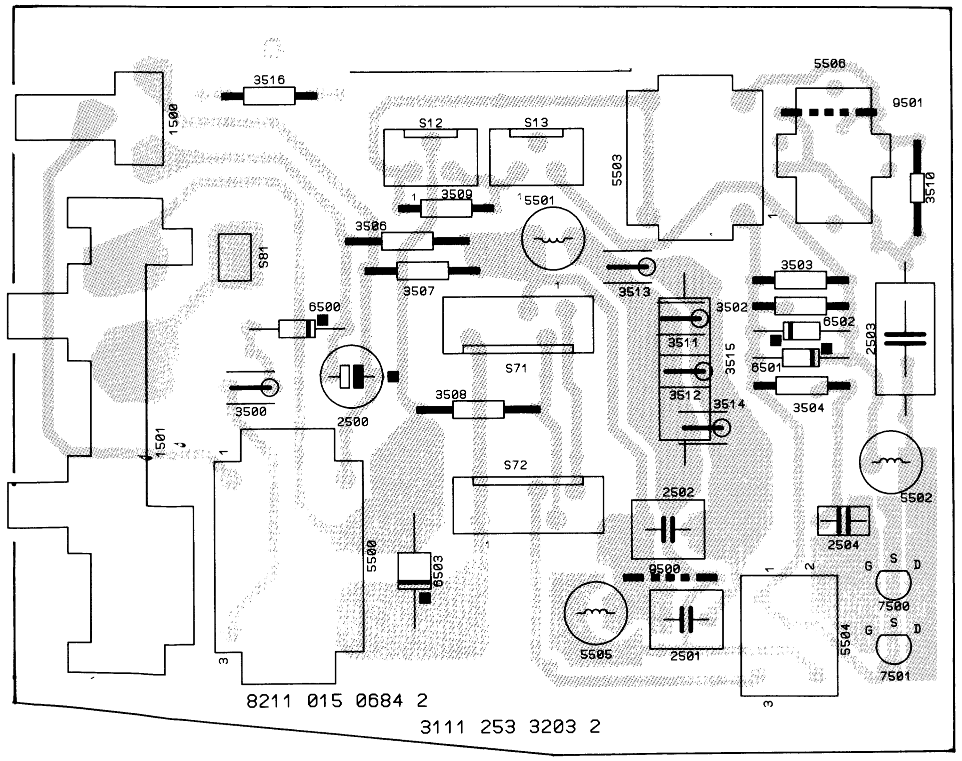
3625
2629
2611
8211 015 0548 3
N23
N37
N38

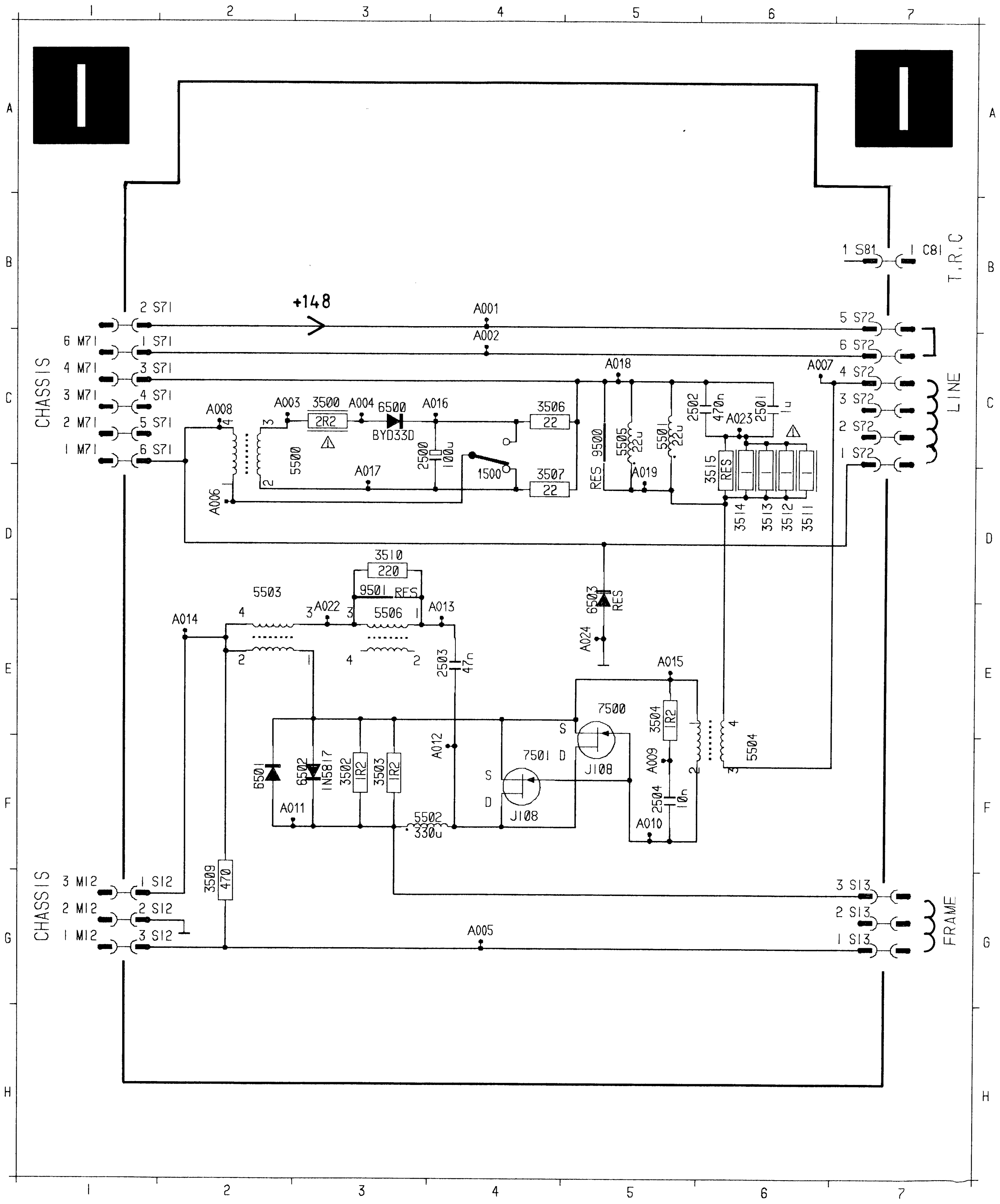
SCANNING MODULE 1009



3516
1500
S12
S13
5503
5506
9501
3510
3509
5501
3506
S81
3507
3513
3503
6500
3502
6502
3511
3515
6501
2503
3512
3514
3500
2500
3508
3504
S71
1501
S72
2502
5502
2504
5500
6503
9500
7500
7501
5505
2501
5504
8211 015 0684 2
3111 253 3203 2

Scanning module

1500	D 4	3503	F 3	3513	D 6	5505	C 5	9501	D 3	A009	F 5	A018	C 5	S12	G 2	S71	C 2	S81	B 7
1501	A 4	3504	E 5	3514	D 6	5506	E 3	A001	B 4	A010	F 5	A019	D 5	S12	G 2	S71	C 2		
2500	C 3	3506	C 4	3515	D 6	6500	C 3	A002	C 4	A011	F 2	A020	B 3	S12	G 2	S71	C 2		
2501	C 6	3507	D 4	3516	G 4	6501	F 2	A003	C 2	A012	F 4	A021	B 5	S13	G 7	S72	C 7		
2502	C 5	3508	B 3	5500	C 3	6502	F 3	A004	C 3	A013	E 4	A022	E 3	S13	G 7	S72	C 7		
2503	E 4	3509	G 2	5501	C 5	6503	D 5	A005	G 4	A014	E 2	A023	C 6	S13	G 7	S72	C 7		
2504	F 5	3510	D 3	5502	F 4	7500	E 5	A006	D 2	A015	E 5	A024	E 5	S71	C 2	S72	C 7		
3500	C 3	3511	D 6	5503	D 2	7501	F 4	A007	C 6	A016	C 4	A025	G 4	S71	B 2	S72	B 7		
3502	F 3	3512	D 6	5504	F 6	9500	C 5	A008	C 2	A017	D 3	A026	G 3	S71	C 2	S72	C 7		



1
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A
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E
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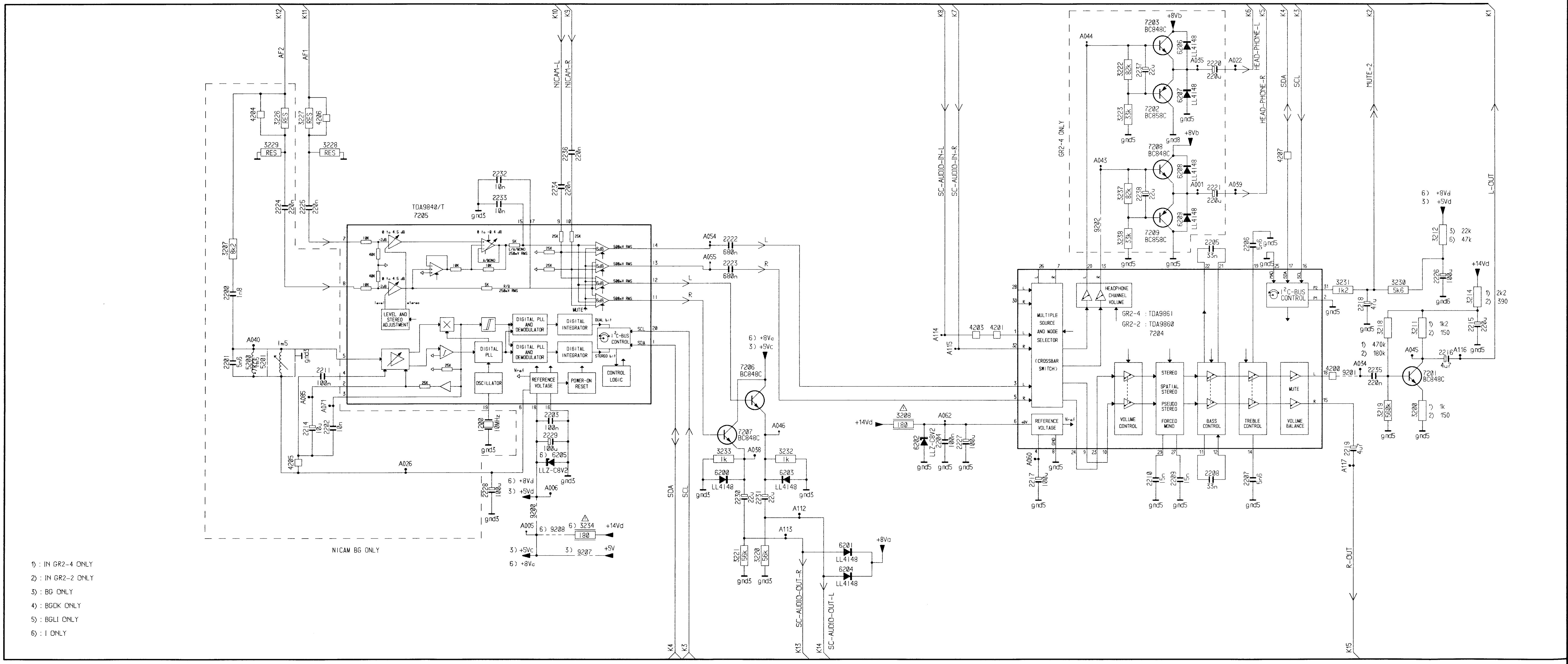
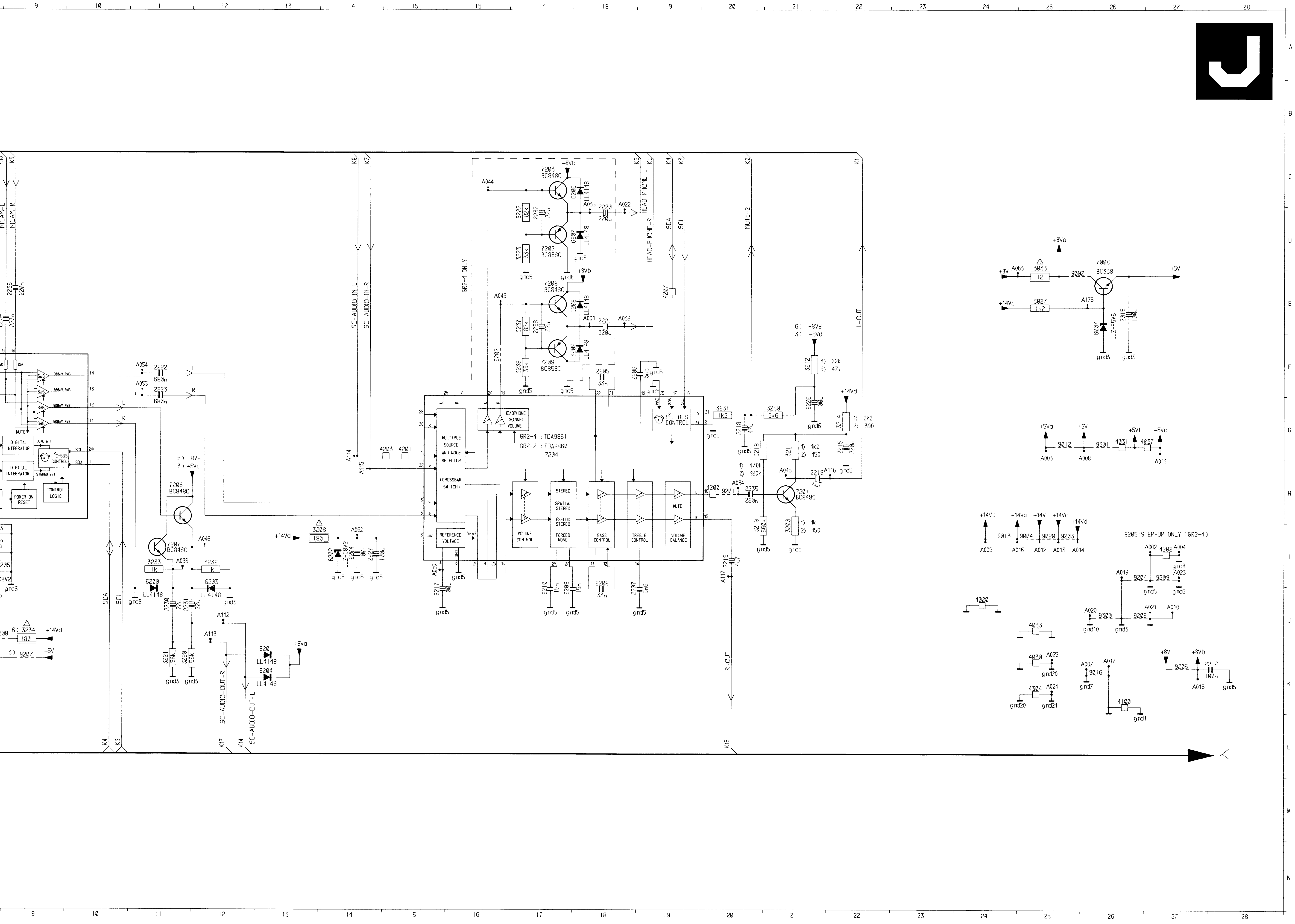
I
1 S81
1 C81
T.R.C
+148
A001
A002
2 S71
1 S71
3 S71
4 S71
5 S71
6 S71
6 M71
4 M71
3 M71
2 M71
1 M71
CHASSIS
5 S72
6 S72
4 S72
3 S72
2 S72
1 S72
LINE
A007
A018
A008
A003
3500
2R2
A004
6500
BYD330
A016
5500
A017
2500
100u
1500
3506
22
3507
22
A006
RES 9500
5505
22u
5501
22u
A019
2502
470n
2501
1u
A023
3515
RES
3514
3513
3512
3511
3510
220
9501 RES
5503
A022
5506
A013
A014
6503
RES
A024
2503
47n
A015
7500
J108
3504
1R2
A009
2504
10n
A010
5504
7501
J108
S
D
A012
6501
6502
1N5817
3502
1R2
3503
1R2
A011
5502
330u
3509
470
3 M12
2 M12
1 M12
1 S12
2 S12
3 S12
A005
3 S13
2 S13
1 S13
FRAME

Nicam IF-Sound module/Nicam ZF-Ton module **CHASSIS GR 2.4** **21** Module FI-Son Nicam


TDA9840/T
7205
NICAM-L
NICAM-R
AF2
AF1
LEVEL AND STEREO ADJUSTMENT
DIGITAL PLL AND DEMODULATOR
DIGITAL INTEGRATOR
DIGITAL PLL
OSCILLATOR
REFERENCE VOLTAGE
POWER-ON RESET
CONTROL LOGIC
I²C-BUS CONTROL
MUTE
SDA
SCL
SC-AUDIO-IN-L
SC-AUDIO-IN-R
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
HEAD-PHONE-L
HEAD-PHONE-R
MUTE-2
L-OUT
R-OUT
GR2-4 ONLY
7203 BC848C
7202 BC858C
7208 BC848C
7209 BC858C
7206 BC848C
7207 BC848C
7201 BC848C
MULTIPLE SOURCE AND MODE SELECTOR (CROSSBAR SWITCH)
HEADPHONE CHANNEL VOLUME
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
VOLUME CONTROL
STEREO SPATIAL STEREO PSEUDO STEREO FORCED MONO
BASS CONTROL
TREBLE CONTROL
MUTE VOLUME BALANCE
REFERENCE VOLTAGE
+14Vd
+8Vb
+8Vc
+5Vc
+8Va
gnd5
K1
K2
K3
K4
K5
K6
K7
K8
K9
K10
K11
K12
K13
K14
K15
NICAM BG ONLY

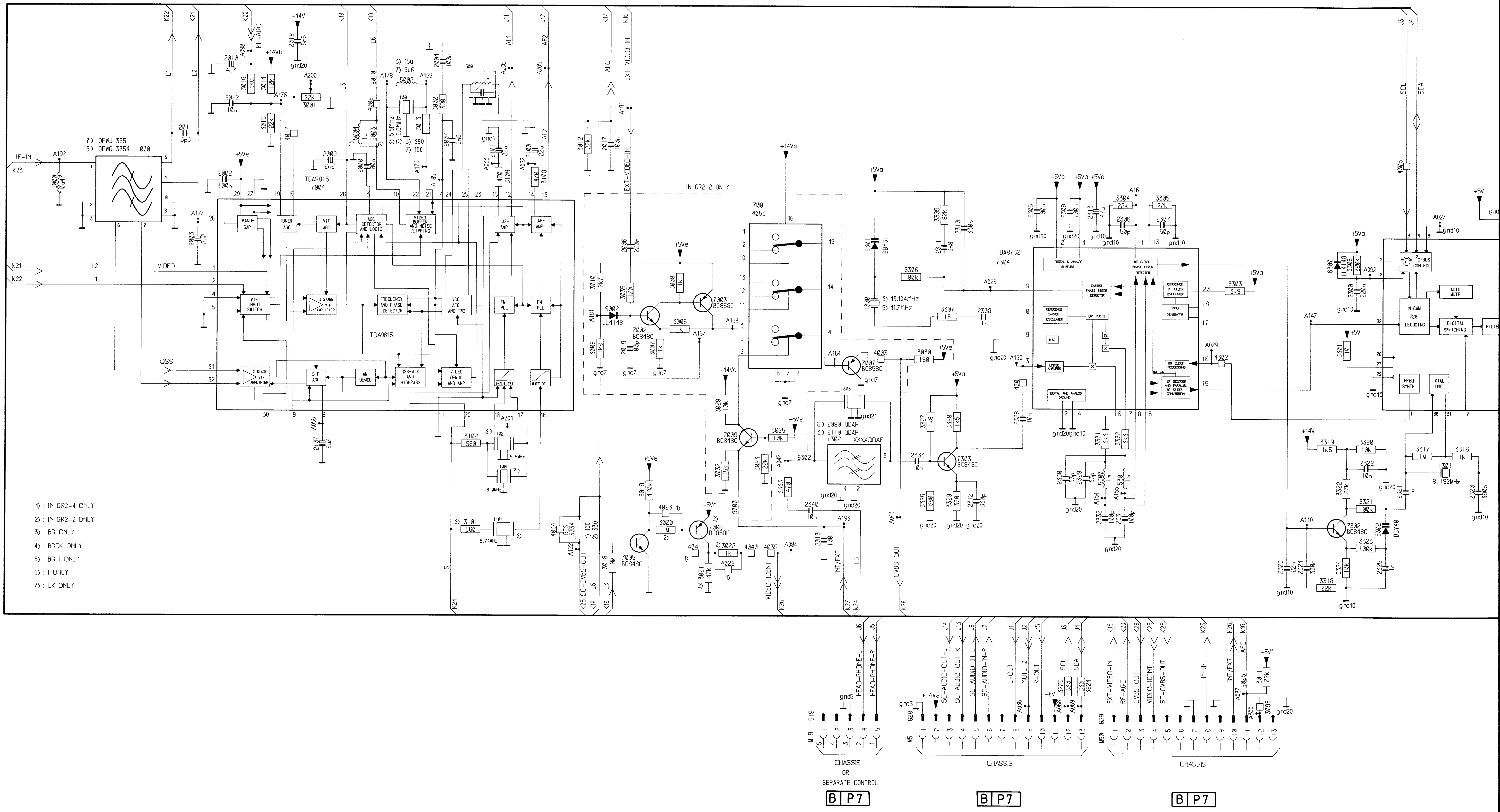
1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
6) : I ONLY

Module FI-Son Nicam


J
GR2-4 ONLY
7203 BC848C
7202 BC858C
7208 BC848C
7209 BC858C
6206 LL4148
6207 LL4148
6208 LL4148
6209 LL4148
HEAD-PHONE-L
HEAD-PHONE-R
SDA
SCL
MUTE-2
L-OUT
R-OUT
SC-AUDIO-IN-L
SC-AUDIO-IN-R
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
NICAM-L
NICAM-R
DIGITAL INTEGRATOR
I²C-BUS CONTROL
CONTROL LOGIC
POWER-ON RESET
MUTE
DUAL bit
STEREO bit
500mV RMS
6dB
MULTIPLE SOURCE AND MODE SELECTOR (CROSSBAR SWITCH)
HEADPHONE CHANNEL VOLUME
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
REFERENCE VOLTAGE
VOLUME CONTROL
STEREO SPATIAL STEREO PSEUDO STEREO FORCED MONO
BASS CONTROL
TREBLE CONTROL
MUTE
VOLUME BALANCE
I²C-BUS CONTROL
7201 BC848C
7206 BC848C
7207 BC848C
6200 LL4148
6203 LL4148
6201 LL4148
6204 LL4148
6202 LLZ-C8V2
3208 180
+14Vd
6) +8Vc
3) +5Vc
6) +8Vd
3) +5Vd
1) 470k
2) 180k
1) 1k
2) 150
1) 2k2
2) 390
3) 22k
6) 47k
7008 BC338
3033 12
3027 1k2
6007 LLZ-F5V6
+8V
+5V
+14Vc
+8Va
9206:STEP-UP ONLY (GR2-4)
K
PCS 74 252

1200	I 7
2015	E26
2200	G 4
2201	H 4
2202	I 5
2203	I 8
2204	I14
2205	F18
2206	F18
2207	J18
2208	I18
2209	J17
2210	J17
2211	H 5
2212	K28
2214	I 5
2215	G22
2216	H21
2217	J15
2218	G20
2219	I20
2220	D18
2221	E18
2222	F11
2223	F11
2224	F 4
2225	F 5
2226	G21
2227	I14
2228	J 7
2229	I 8
2230	J11
2231	J11
2232	E 8
2233	E 8
2234	E 8
2235	H20
2236	E 9
2237	D17
2238	E17
3027	E25
3033	D25
3200	I21
3207	F 4
3208	I14
3211	G21
3212	F21
3214	G22
3218	G20
3219	I20
3220	K11
3221	K11
3222	D17
3223	D17
3226	D 4
3227	D 5
3228	E 5
3229	E 4
3230	G21
3231	G20
3232	I12
3233	I11
3234	J 9
3237	E17
3238	F17
4020	J24
4030	K25
4031	G26
4033	J25
4037	G27
4100	K26
4200	H20
4201	G15
4202	I27
4203	G15
4204	D 4
4205	I 5
4206	D 5
4207	E19
4304	K25
5200	H 4
5201	H 4
6007	E26
6200	I11
6201	K13
6202	I14
6203	I12
6204	K13
6205	I 9
6206	C18
6207	D18
6208	E18
6209	F18
7008	D26
7201	H21
7202	D17
7203	C17
7204	G17
7205	F 6
7206	H11
7207	I11
7208	E17
7209	F17
9002	E25
9004	I25
9012	G25
9013	I24
9016	K26
9020	I25
9200	J 8
9201	H20
9202	F16
9203	I25
9204	I26
9205	J26
9206	K27
9207	K 9
9208	J 9
9209	I27
9300	J26
9301	G26
A001	E18
A002	I27
A003	G25
A004	I27
A005	J 8
A006	J 8
A007	K26
A008	G26
A009	I24
A010	J27
A011	H27
A012	I25
A013	I25
A014	I25
A015	K27
A016	I25
A017	K26
A019	I26
A020	J26
A021	J27
A022	C18
A023	I27
A024	K25
A025	K25
A026	I 6
A034	H20
A035	C18
A038	I11
A039	E18
A040	H 4
A043	E16
A044	C16
A045	H21
A046	I12
A054	F11
A055	F11
A060	I15
A062	I14
A063	D24
A071	H 5
A085	H 5
A112	J12
A113	J12
A114	G14
A115	H14
A116	H22
A117	I20
A175	E26

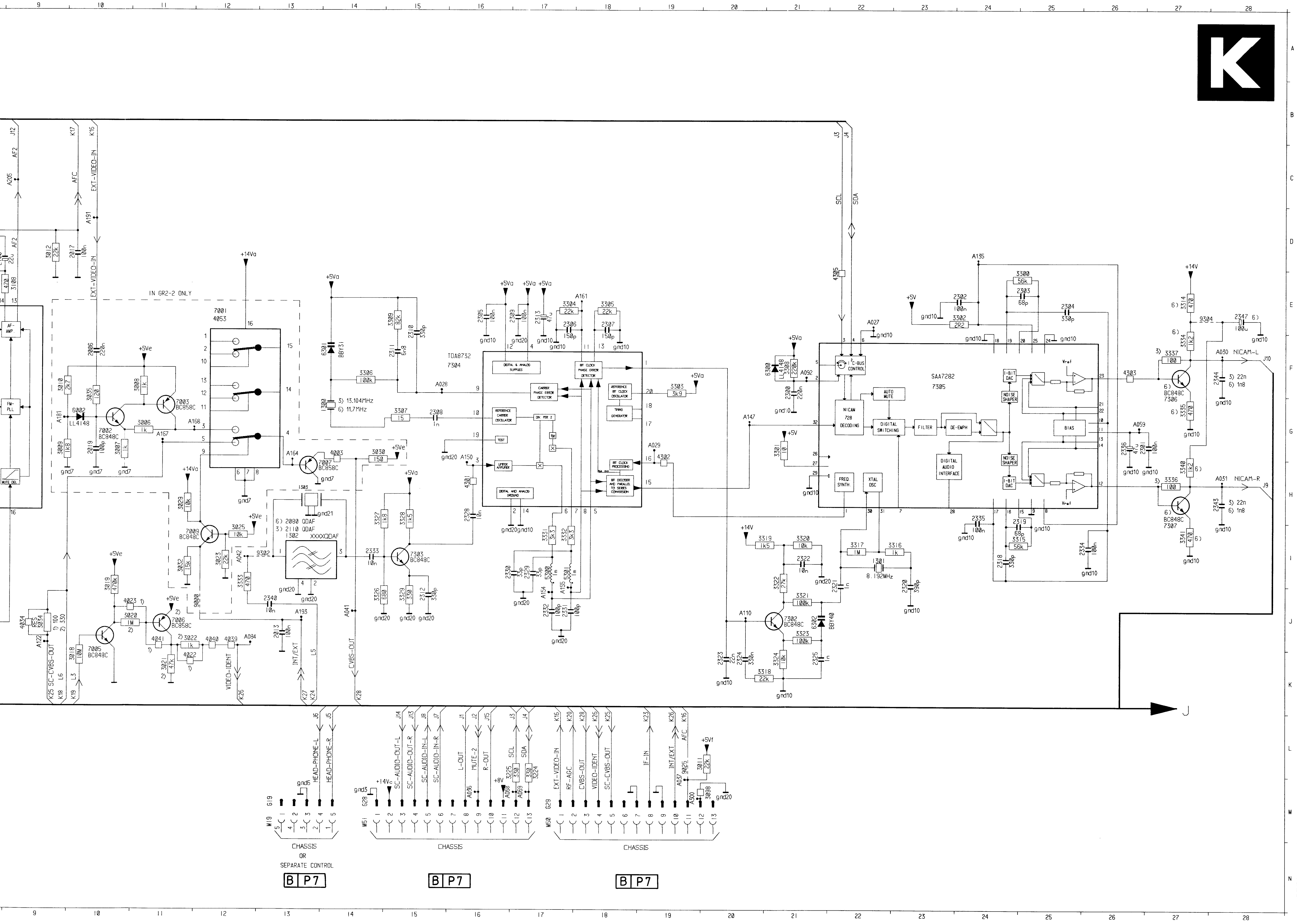
K


IF-IN
K23
A192
7) OFWJ 3351
3) OFWG 3354 1000
TDA9815
7004
BAND-GAP
TUNER AGC
VIF AGC
AGC DETECTOR AND LOGIC
VIDEO BUFFER AND NOISE CLIPPING
AF-AMP
VIF INPUT SWITCH
3 STAGE VIF AMPLIFIER
FREQUENCY- AND PHASE-DETECTOR
VCO AFC AND TWD
FM-PLL
2 STAGE SIF AMPLIFIER
SIF AGC
AM DEMOD
QSS-MIX AND HIGHPASS
VIDEO DEMOD AND AMP
INPUT SW1
MUTE DEL
K21
K22
L2
L1
VIDEO
QSS
RF-AGC
AF1
AF2
AFC
EXT-VIDEO-IN
IN GR2-2 ONLY
7001
4053
7003
BC858C
7002
BC848C
LL4148
7009
BC848C
7007
BC858C
7005
BC848C
7006
BC858C
7303
BC848C
6) 2080 QDAF
3) 2110 QDAF
1302 XXXXQDAF
BBY31
3) 13.104MHz
6) 11.7MHz
TDA8732
7304
DIGITAL & ANALOG SUPPLIES
BIT CLOCK PHASE ERROR DETECTOR
CARRIER PHASE ERROR DETECTOR
REFERENCE BIT CLOCK OSCILLATOR
REFERENCE CARRIER OSCILLATOR
DIV PER 2
TIMING GENERATOR
TEST
LIMITER AMPLIFIER
BIT CLOCK PROCESSING
BIT DECODER AND PARALLEL TO SERIES CONVERSION
DIGITAL AND ANALOG GROUND
I²C-BUS CONTROL
AUTO MUTE
NICAM 728 DECODING
DIGITAL SWITCHING
FILTE
FREQ SYNTH.
XTAL OSC
8.192MHz
7302
BC848C
BBY40
SCL
SDA
VIDEO-IDENT
INT/EXT
CVBS-OUT
SC-CVBS-OUT
5.5MHz
6.0MHz
5.74MHz
HEAD-PHONE-L
HEAD-PHONE-R
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
IF-IN
INT/EXT
AFC
M19
M51
M50
CHASSIS
OR
SEPARATE CONTROL
B P7
CHASSIS
B P7
CHASSIS
B P7

1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
6) : I ONLY
7) : UK ONLY

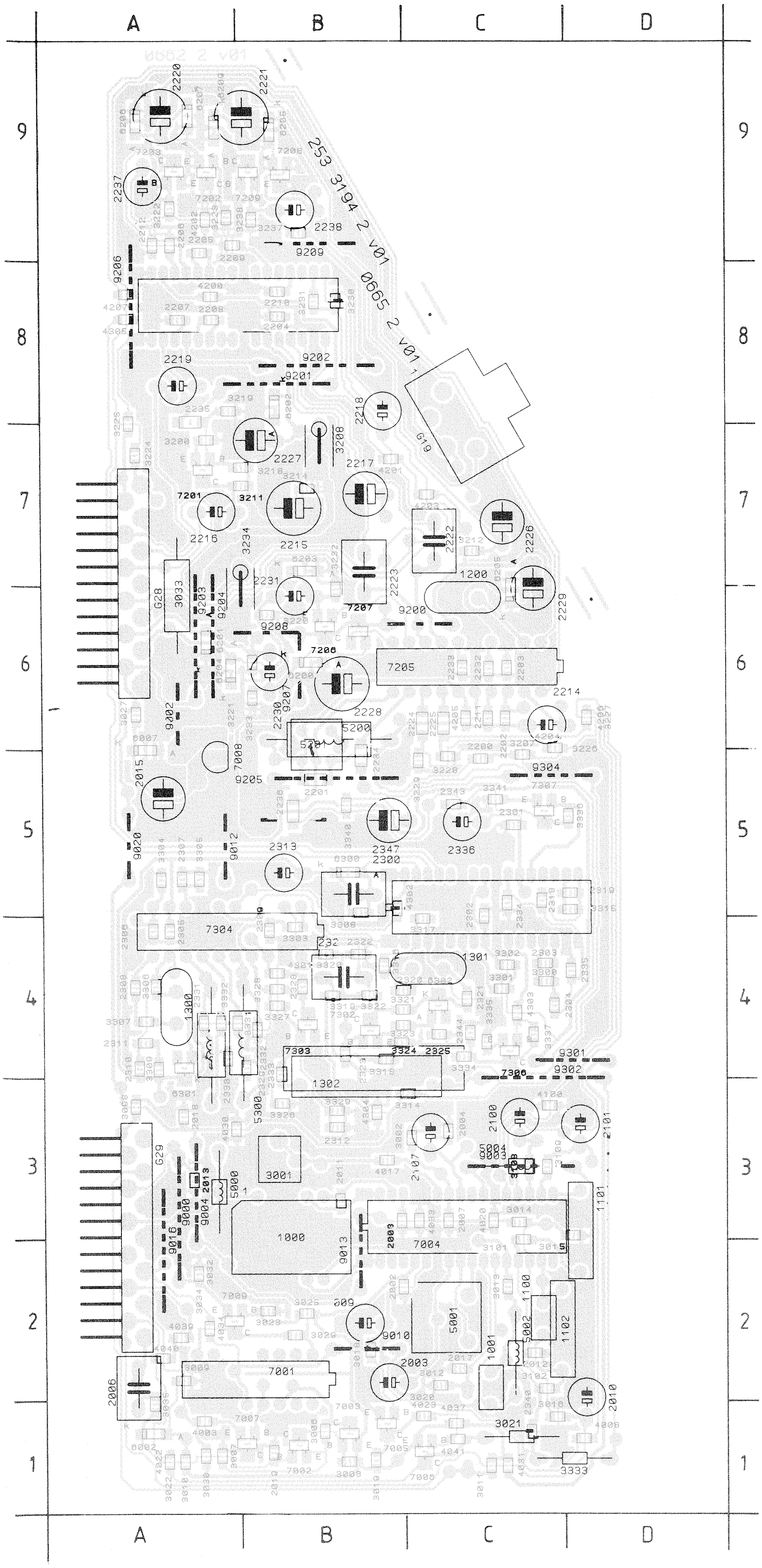
Module FI-Son Nicam

K


IN GR2-2 ONLY
7001
4053
7002
BC848C
7003
BC858C
7005
BC848C
7006
BC858C
7007
BC858C
7009
BC848C
6002
LL4148
6301
BBY31
6300
LL4148
6302
BBY40
1302
XXXXQDAF
6) 2080 QDAF
3) 2110 QDAF
3) 13,104MHz
6) 11,7MHz
TDA8732
7304
DIGITAL & ANALOG SUPPLIES
CARRIER PHASE ERROR DETECTOR
BIT CLOCK PHASE ERROR DETECTOR
REFERENCE BIT CLOCK OSCILLATOR
TIMING GENERATOR
REFERENCE CARRIER OSCILLATOR
DIV. PER 2
TEST
LIMITER AMPLIFIER
BIT CLOCK PROCESSING
BIT DECODER AND PARALLEL TO SERIES CONVERSION
DIGITAL AND ANALOG GROUND
7303
BC848C
SAA7282
7305
I²C-BUS CONTROL
NICAM 728 DECODING
AUTO MUTE
DIGITAL SWITCHING
FILTER
DE-EMPH
DIGITAL AUDIO INTERFACE
FREQ SYNTH
XTAL OSC
I-BIT DAC
NOISE SHAPER
BIAS
Vref
1301
8.192MHz
7302
BC848C
7306
BC848C
7307
BC848C
A030 NICAM-L
A031 NICAM-R
J10
J9
SCL
SDA
J3
J4
AF-AMP
FM-PLL
MUTE DEL
AFC
EXT-VIDEO-IN
AF2
SC-CVBS-OUT
VIDEO-IDENT
INT/EXT
CVBS-OUT
HEAD-PHONE-L
HEAD-PHONE-R
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
IF-IN
INT/EXT
AFC
+14Va
+5Va
+5Ve
+5V
+14V
+8V
+5Vf
M19
G19
M51
G28
M50
G29
CHASSIS OR SEPARATE CONTROL
CHASSIS
CHASSIS
B P7
B P7
B P7
J

1000	D 2	7002	G10
1001	D 6	7003	G11
1100	I 8	7004	E 5
1101	J 8	7005	K10
1102	I 8	7006	J11
1300	G14	7007	H13
1301	I22	7009	I12
1302	I13	7302	J21
1303	H13	7303	I15
2002	E 4	7304	F15
2003	F 3	7305	F23
2004	C 7	7306	G27
2006	F10	7307	I27
2007	D 7	9000	J12
2008	E 6	9003	D 6
2009	D 5	9010	C 6
2010	C 4	9025	L19
2011	D 3	9302	I13
2012	D 4	9304	E27
2013	J13	A027	E22
2017	D10	A028	F15
2018	C 5	A029	G19
2019	G10	A030	F28
2100	D 8	A031	H28
2101	D 8	A032	E 8
2107	I 5	A033	E 8
2300	F21	A036	M16
2301	G26	A037	M19
2302	E24	A041	J14
2303	E25	A042	I12
2304	E25	A056	I 5
2305	E16	A059	G26
2306	E17	A068	M16
2307	E18	A069	M17
2308	G15	A084	J12
2309	E17	A092	F21
2310	E15	A098	C 4
2311	F15	A110	J20
2312	J15	A122	J 9
2313	E17	A135	D24
2318	I24	A147	G20
2319	H25	A150	G16
2320	I23	A154	J17
2321	I22	A155	J17
2322	I21	A161	E18
2323	K20	A164	G13
2324	K20	A167	G11
2325	K21	A168	G11
2328	H16	A169	C 7
2329	I17	A176	D 5
2330	I16	A177	E 3
2331	J17	A178	C 6
2332	J17	A179	E 7
2333	I14	A181	G 9
2334	I26	A185	E 7
2335	H24	A191	D10
2336	G26	A192	D 1
2340	J13	A193	J13
2343	H28	A200	C 5
2344	F28	A201	H 8
2347	E28	A205	C 9
3001	D 5	A206	C 8
3002	D 7	A300	M19
3006	G11	G19	M13
3007	G10	G19	M13
3008	F11	G19	M13
3009	G 9	G19	M13
3010	F 9	G19	M14
3011	L20	G28	M14
3012	D 9	G28	M15
3013	D 7	G28	M15
3014	C 4	G28	M15
3015	D 4	G28	M15
3016	C 4	G28	M15
3018	K10	G28	M16
3019	I10	G28	M16
3020	J11	G28	M16
3021	K11	G28	M16
3022	J11	G28	M16
3023	I12	G28	M17
3025	I12	G28	M17
3029	H11	G29	M17
3030	G14	G29	M17
3032	I11	G29	M18
3034	J 9	G29	M18
3035	F10	G29	M18
3098	M20	G29	M18
3101	J 8	G29	M18
3102	I 8	G29	M19
3108	E 9	G29	M19
3109	E 8	G29	M19
3224	L17	G29	M19
3225	L17	G29	M19
3300	E25	G29	M20
3301	G21		
3302	E24		
3303	F19		
3304	E17		
3305	E18		
3306	F14		
3307	G15		
3308	F21		
3309	E15		
3314	E27		
3315	I25		
3316	I23		
3317	I22		
3318	K21		
3319	I21		
3320	I21		
3321	J21		
3322	I21		
3323	J21		
3324	K21		
3326	J14		
3327	H14		
3328	H15		
3329	J15		
3331	I17		
3332	I17		
3333	I12		
3334	F27		
3335	G27		
3336	H27		
3337	F27		
3340	H27		
3341	I27		
4003	G14		
4008	D 6		
4017	D 5		
4022	K11		
4023	J10		
4034	J 9		
4039	J12		
4040	J12		
4041	J11		
4301	H16		
4302	G19		
4303	F26		
4305	E22		
5000	E 1		
5001	C 7		
5002	C 7		
5004	D 6		
5300	I17		
5301	I17		
6002	G10		
6300	F20		
6301	F14		
6302	J21		
7001	E12		

Nicam IF module



G28	C7
G29	C3
1000	B3
1001	A2
1100	A2
1101	A3
1102	A2
1200	A6
1300	C4
1301	A4
1302	B3
1303	B3
2002	B2
2003	B2
2004	A3
2006	C2
2007	A3
2008	B3
2009	B2
2010	A1
2011	B3
2012	A2
2013	C3
2015	C5
2017	A2
2018	C3
2019	B1
2100	A3
2101	A3
2107	A3
2200	A5
2201	B5
2202	A6
2203	A6
2204	B8
2205	C9
2206	C9
2207	C8
2208	C8
2209	C9
2210	B8
2211	A6
2212	C9
2214	A6
2215	B7
2216	C7
2217	B7
2218	B8
2219	C8
2220	C9
2221	C9
2222	A7
2223	B7
2224	A6
2225	A6
2226	A7
2227	C7
2228	B6
2229	A6
2230	B6
2231	B6
2232	A6
2233	A6
2234	B5
2235	C8
2236	B5
2237	C9
2238	B9
2300	B5
2301	A5
2302	A4
2303	A4
2304	A4
2305	C4
2306	C4
2307	C5
2308	C4
2309	B4
2310	C4
2311	C4
2312	B3
2313	B5
2318	A5
2319	A5
2320	B4
2321	A4
2322	B4
2323	B4
2324	B4
2325	A4
2328	B4
2329	C4
2330	C4
2331	C4
2332	C4
2333	B4
2334	A5
2335	A4
2336	A5
2340	A1
2343	A5
2344	A4
2347	B5
3001	B3
3002	B3
3006	B1
3007	C1
3008	B1
3009	C2
3010	C1
3011	A1
3012	A2
3013	A2
3014	A3
3015	A3
3016	A1
3018	B2
3019	B1
3020	A1
3021	A1
3022	C1
3023	B2
3025	B2
3027	C6
3029	B2
3030	C1
3032	C2
3033	C6
3034	C2
3035	C1
3098	C3
3101	A2
3102	A2
3108	A3
3109	A3
3200	C7
3207	A5
3208	B7
3211	C7
3212	A7
3214	B7
3218	C7
3219	C8
3220	B6
3221	C6
3222	C9
3223	C9
3224	C7
3226	A6
3227	A5
3228	A5
3229	B5
3230	B8
3231	B8
3232	B6
3233	C6
3234	C6
3237	B9
3238	C9
3300	A4
3301	A4
3302	A4
3303	B4
3304	C5
3305	C5
3306	C4
3307	C4
3308	B4
3309	C4
3314	B3
3315	A5
3316	B4
3317	A4
3318	B4
3319	B4
3320	B4
3321	B4
3322	B4
3323	B4
3324	B4
3326	B3
3327	B4
3328	B4
3329	B3
3331	C4
3332	C4
3333	A1
3334	A4
3335	A4
3336	A5
3337	A4
3340	B5
3341	A5
4003	C1
4008	A1
4017	B3
4020	A3
4022	C1
4023	A1
4030	C3
4031	A1
4033	B3
4034	C2
4037	A1
4039	C2
4040	C2
4041	A1
4100	A3
4200	C8
4201	B7
4202	C9
4203	A7
4204	A6
4205	A6
4206	A6
4301	B4
4302	B5
4303	A4
4304	B3
5000	C3
5001	A2
5002	A2
5004	A3
5200	B6
5201	B6
5300	C4
5301	C4
6002	C1
6007	C5
6200	B6
6201	C6
6202	B8
6203	B7
6204	C6
6205	A6
6206	C9
6207	C9
6208	B9
6209	C9
6300	B5
6301	C4
6302	A4
7001	C2
7002	B1
7003	B1
7004	A3
7005	B1
7006	A1
7007	C1
7008	C5
7009	C2
7201	C7
7202	C9
7203	C9
7204	C8
7205	A6
7206	B6
7207	B6
7208	B9
7209	C9
7302	B4
7303	B4
7304	C4
7305	A5
7306	A4
7307	A5
9000	C3
9002	C6
9003	A3
9004	C3
9010	B2
9012	C5
9013	B2
9016	C2
9025	A1
9200	B6
9201	B8
9202	B8
9203	C6
9204	C6
9205	B5
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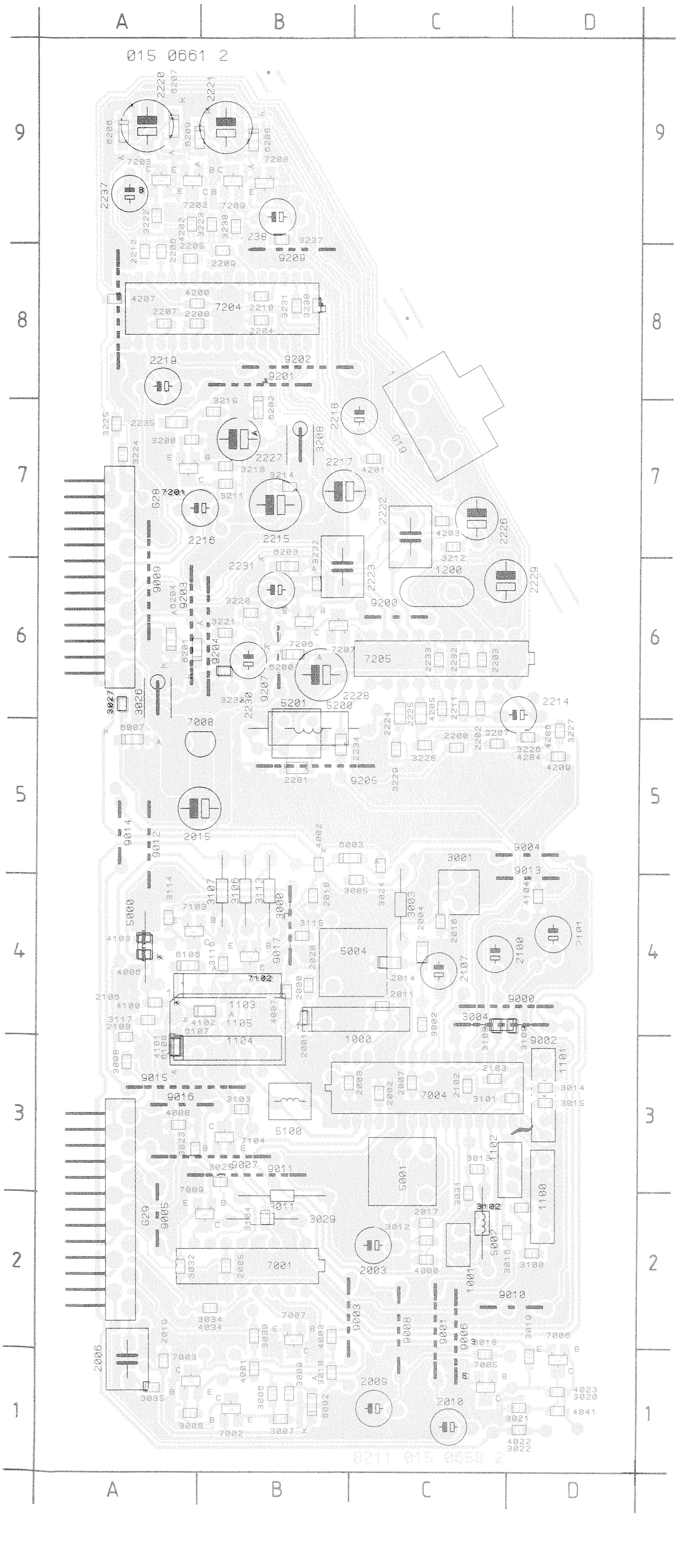
9208	B6
9209	B9
9300	B5
9301	A4
9302	A3
9304	A5

Stereo IF module



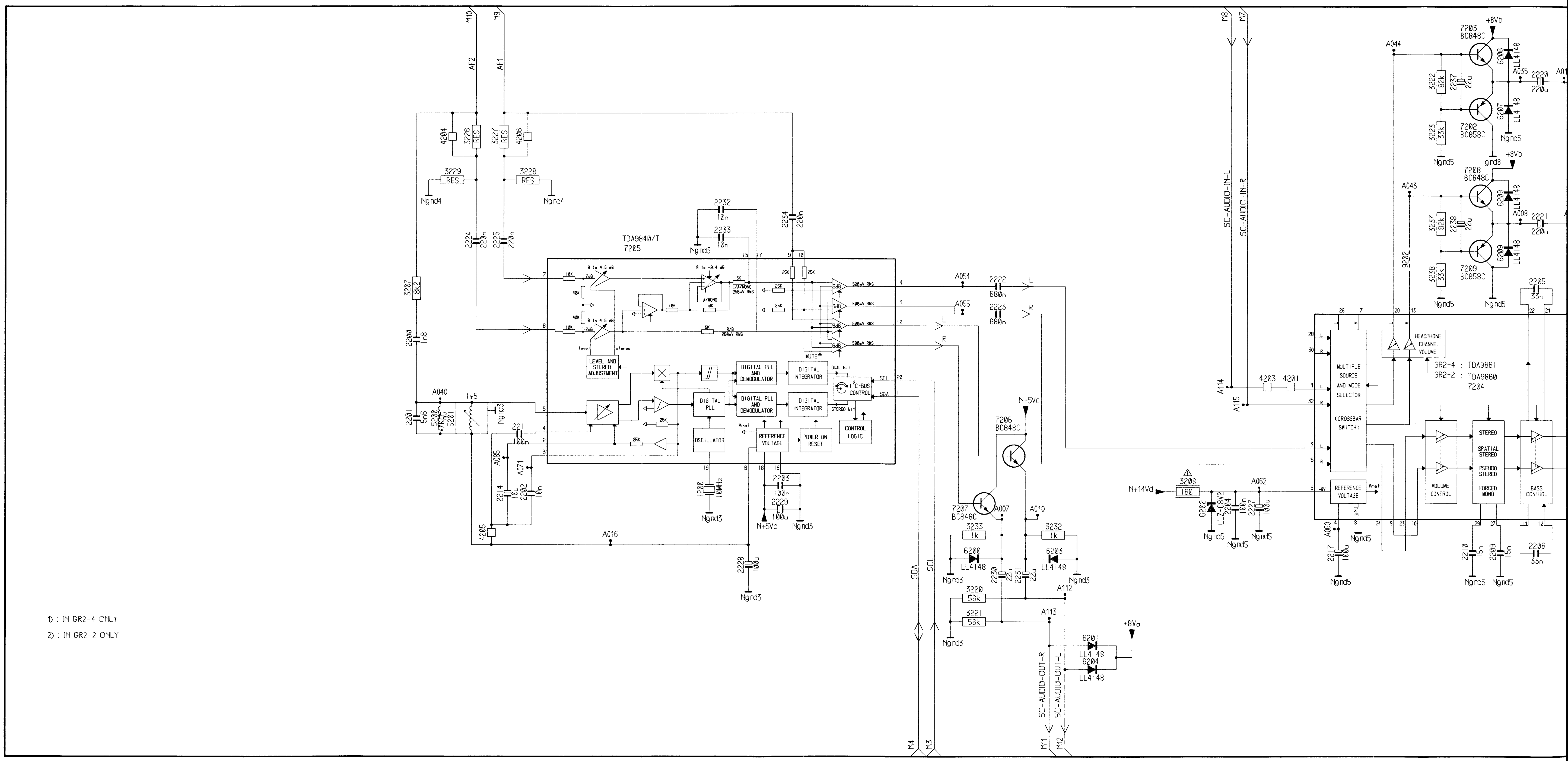
1000	C3
1001	B2
1100	A2
1101	A3
1102	B3
1103	C4
1104	C3
1105	C3
1200	B6
2000	C4
2001	C4
2002	B3
2003	B2
2004	B4
2005	C2
2006	D1
2007	B3
2008	C3
2009	B1
2010	B1
2011	B4
2014	B4
2015	D5
2016	B4
2017	B2
2018	C4
2019	D1
2020	C4
2100	B4
2101	A4
2102	B3
2103	B3
2106	D4
2107	B4
2108	D3
2200	B5
2201	C5
2202	B5
2203	B6
2204	C8
2205	D8
2206	D8
2207	D8
2208	D8
2209	C8
2210	C8
2211	B5
2212	D8
2214	B5
2215	C7
2216	D7
2217	C7
2218	C7
2219	D8
2220	D9
2221	C9
2222	B7
2223	C6
2224	B5
2225	B5
2226	B7
2227	C7
2228	C6
2229	B6
2230	C6
2231	C6
2232	B6
2233	B6
2234	C5
2235	D7
2237	D9
2238	C9
3000	C4
3001	B4
3002	B3
3003	B4
3004	B3
3005	C4
3006	C1
3007	C1
3008	D1
3009	C1
3010	C1
3011	C2
3012	B2
3013	B3
3014	A3
3015	A3
3016	B2
3018	B1
3019	A1
3020	A1
3021	B1
3022	B1
3023	D3
3024	B4
3025	C2
3026	D6
3027	D6
3029	C2
3030	C2
3031	B2
3032	D2
3034	D2
3035	D1
3098	D3
3100	A2
3101	B3
3102	B2
3103	C3
3104	C2
3106	C4
3107	C4
3108	B3
3109	B3
3113	C4
3114	D4
3115	C4
3116	C4
3117	D4
3200	D7
3207	B5
3208	C7
3211	C7
3212	B7
3214	C7
3218	C7
3219	C7
3220	C6
3221	C6
3222	D9
3223	C9
3224	D7
3225	D7
3226	A5
3227	A5
3228	B5
3229	B5
3230	C8
3231	C8
3232	C6
3233	C6
3237	C8
3238	C9
4000	B2
4001	C1
4002	C4
4003	C1
4006	D4
4007	C4
4008	D3
4022	B1
4023	A1
4034	D2
4041	A1
4100	D4
4101	D3
4102	D4
4103	D4
4104	A4
4200	D8
4201	B7
4202	D9
4203	B7
4204	A5
4205	B5
4207	D8
4209	A5
5000	D4
5001	B3
5002	B2
5004	C4
5100	C3
5200	C5
5201	C5
6002	C1
6003	C5
6007	D5
6100	D3
6106	D4
6107	D4
6200	C6
6201	D6
6202	C7
6203	C6
6204	D6
6206	D9
6207	D9
6208	C9
6209	D9
7001	C2
7002	C1
7003	D1
7004	B3
7005	B1
7006	A1
7007	C1
7008	D5
7009	D2
7102	C4
7103	D4
7104	C3
7201	D7
7202	D9
7203	D9
7204	C8
7205	B6
7206	C6
7207	C6
7208	C9
7209	C9
9000	B4
9001	B2
9002	B3
9003	C2
9004	A5
9005	D2
9006	B1
9007	C3
9008	B2
9009	D6
9010	B2
9011	C3
9012	D5
9013	A4
9014	D5
9015	D3
9016	D3
9017	C4
9200	B6
9201	C8
9202	C8
9203	D6
9204	D6
9205	C5
9206	D8
9207	C6
9209	C8
G19	B7
G28	D6
G29	D2

Stereo IF-Sound module/Stereo ZF-Ton module

CHASSIS GR 2.4 **25**

Module FI-Son Stereo

L

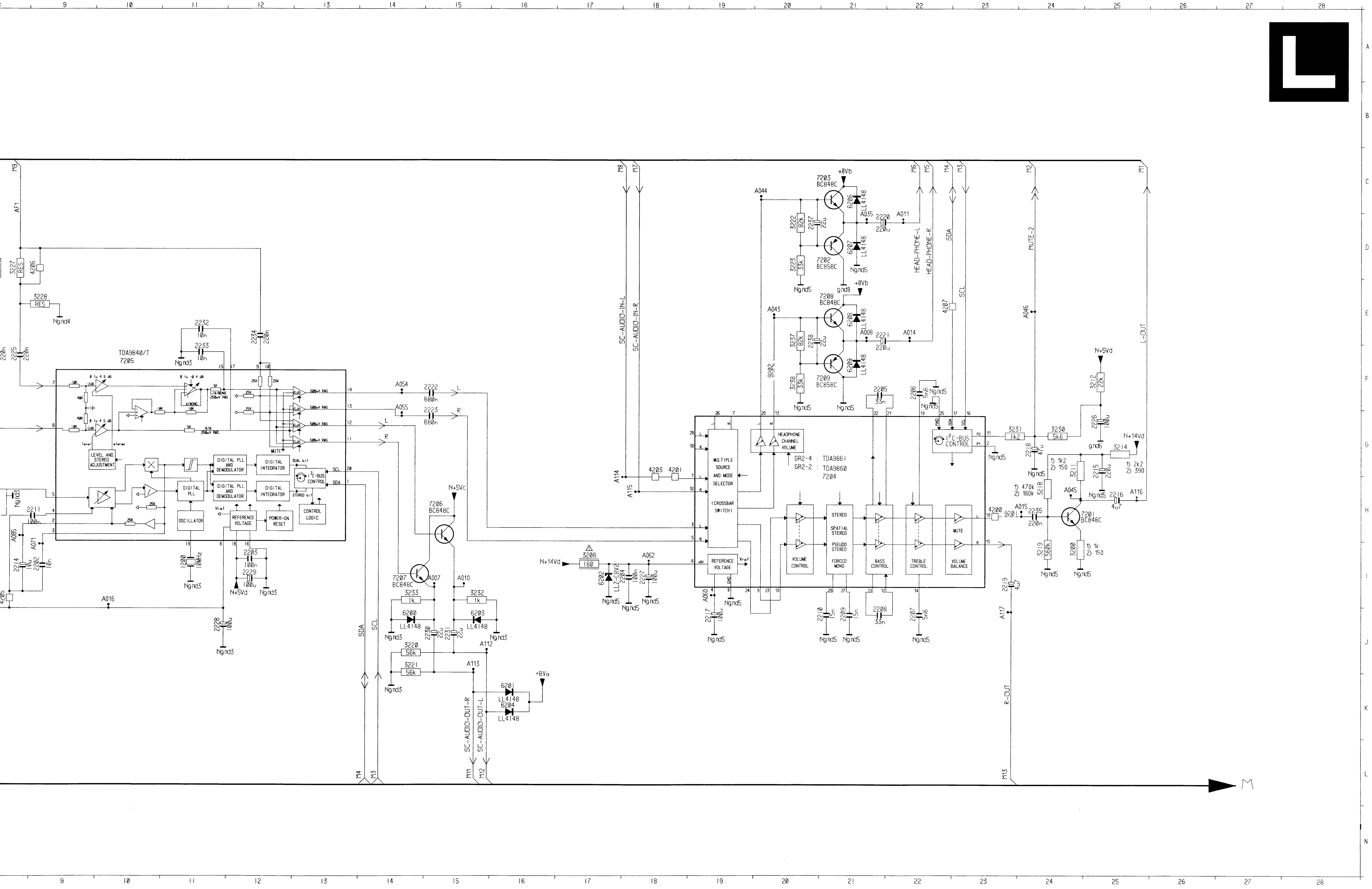


M10
M9
AF2
AF1
4204
3226 RES
3227 RES
4206
3229 RES
3228 RES
Ngnd4
2232 10n
2233 10n
2234 220n
2224 220n
2225 220n
Ngnd3
TDA9840/T
7205
3207 8k2
2200 1n8
LEVEL AND STEREO ADJUSTMENT
DIGITAL PLL AND DEMODULATOR
DIGITAL INTEGRATOR
DIGITAL PLL
OSCILLATOR
REFERENCE VOLTAGE
POWER-ON RESET
CONTROL LOGIC
I²C-BUS CONTROL
MUTE
SCL
SDA
A040
1m5
2201 5n6
5200
5201
2211 100n
A085
A071
2214 10u
2202 10n
4205
A016
1200 10MHz
2203 100n
2229 100u
N+5Vd
2228 100u
A054
2222 680n
A055
2223 680n
L
R
N+5Vc
7206 BC848C
7207 BC848C
A007
A010
3233 1k
3232 1k
6200 LL4148
6203 LL4148
2230 22u
2231 22u
3220 56k
3221 56k
A112
A113
6201 LL4148
6204 LL4148
+8Va
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
M11
M12
M4
M3
SDA
SCL
M8
M7
SC-AUDIO-IN-L
SC-AUDIO-IN-R
A114
A115
4203
4201
N+14Vd
3208 180
6202 LLZ-C9V2
2204 100n
2227 100u
A062
Ngnd5
MULTIPLE SOURCE AND MODE SELECTOR (CROSSBAR SWITCH)
HEADPHONE CHANNEL VOLUME
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
REFERENCE VOLTAGE
VOLUME CONTROL
STEREO SPATIAL STEREO PSEUDO STEREO FORCED MONO
BASS CONTROL
A060
2217 100u
2210 15n
2209 15n
2208 33n
2205 33n
9202
A044
A043
7203 BC848C
7202 BC858C
7208 BC848C
7209 BC858C
6206 LL4148
6207 LL4148
6208 LL4148
6209 LL4148
3222 82K
3223 33K
3237 82K
3238 33K
2237 22u
2238 22u
A035
A008
2220 220u
2221 220u
+8Vb
gnd8

1) : IN GR2-4 ONLY

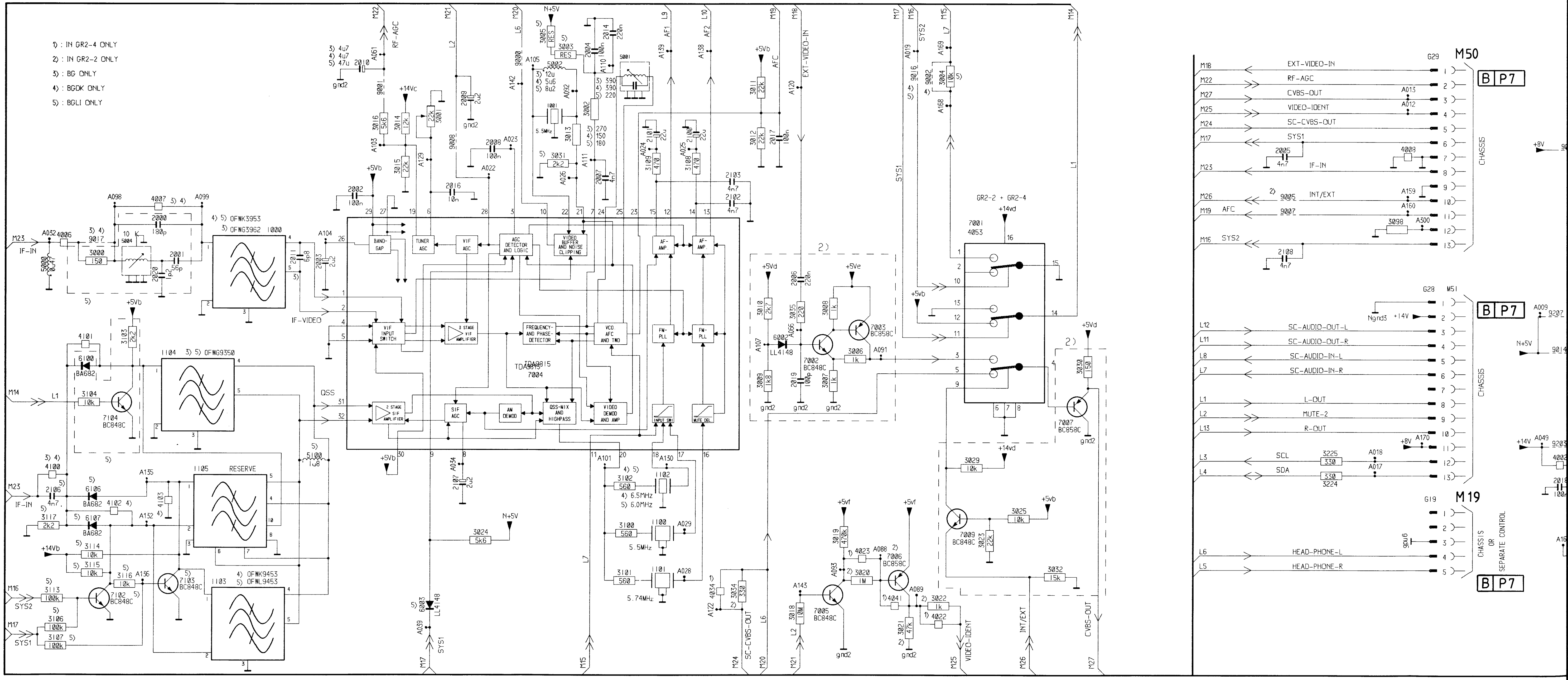
2) : IN GR2-2 ONLY

Module FI-Son Stereo

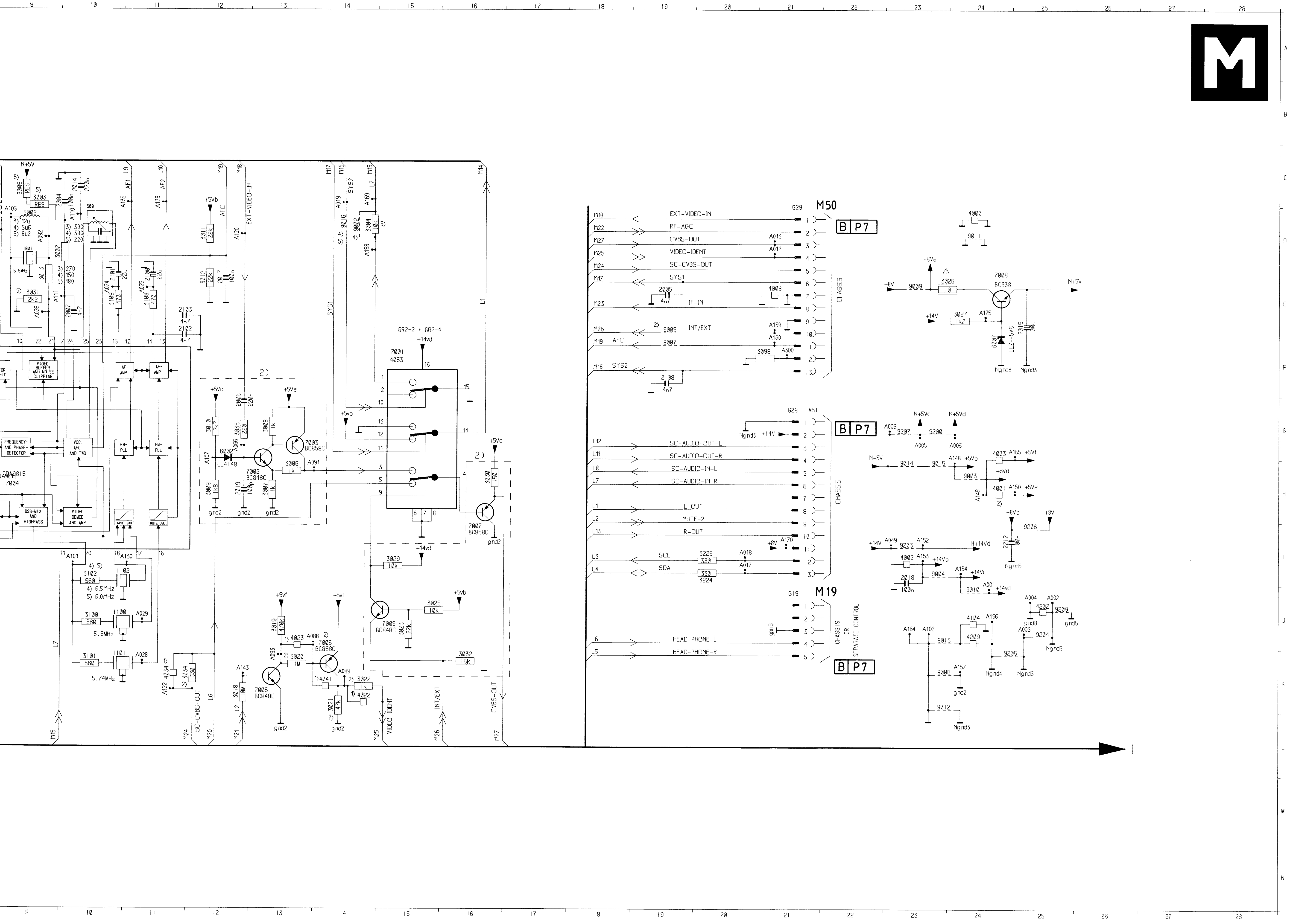

L
M
TDA9840/T
7205
LEVEL AND STEREO ADJUSTMENT
DIGITAL PLL
DIGITAL PLL AND DEMODULATOR
DIGITAL INTEGRATOR
I²C-BUS CONTROL
CONTROL LOGIC
OSCILLATOR
REFERENCE VOLTAGE
POWER-ON RESET
MUTE
1200
10MHz
AF1
SDA
SCL
7206
BC848C
7207
BC848C
SC-AUDIO-OUT-R
SC-AUDIO-OUT-L
SC-AUDIO-IN-L
SC-AUDIO-IN-R
N+14Vd
N+5Vd
N+5Vc
+8Va
+8Vb
7203
BC848C
7202
BC858C
7208
BC848C
7209
BC858C
HEAD-PHONE-L
HEAD-PHONE-R
MUTE-2
L-OUT
R-OUT
MULTIPLE SOURCE AND MODE SELECTOR
(CROSSBAR SWITCH)
HEADPHONE CHANNEL VOLUME
GR2-4 : TDA9861
GR2-2 : TDA9860
7204
VOLUME CONTROL
STEREO SPATIAL STEREO PSEUDO STEREO FORCED MONO
BASS CONTROL
TREBLE CONTROL
VOLUME BALANCE
I²C-BUS CONTROL
7201
BC848C
LLZ-C8V2
LL4148
Ngnd3
Ngnd4
Ngnd5
M1
M2
M3
M4
M5
M6
M7
M8
M9
M11
M12
M13
M14

1200	I11
2200	G 7
2201	H 7
2202	I 9
2203	I12
2204	I18
2205	F21
2206	F22
2207	J22
2208	J21
2209	J21
2210	J21
2211	H 9
2214	I 8
2215	G25
2216	H25
2217	J19
2218	G24
2219	I23
2220	D21
2221	E21
2222	F15
2223	G15
2224	F 8
2225	F 8
2226	G25
2227	I18
2228	J11
2229	I12
2230	J15
2231	J15
2232	E11
2233	F11
2234	E12
2235	H24
2237	D20
2238	E20
3200	I24
3207	F 7
3208	I17
3211	G24
3212	F25
3214	G25
3218	H24
3219	I24
3220	J14
3221	J14
3222	D20
3223	D20
3226	D 8
3227	D 8
3228	E 9
3229	E 8
3230	G24
3231	G23
3232	I15
3233	I14
3237	E20
3238	F20
4200	H23
4201	G18
4203	G18
4204	D 8
4205	I 8
4206	D 9
4207	E22
5200	H 8
5201	H 8
6200	J14
6201	K16
6202	I17
6203	J15
6204	K16
6206	C21
6207	D21
6208	E21
6209	F21
7201	H24
7202	D20
7203	C20
7204	H21
7205	F10
7206	H15
7207	I14
7208	E20
7209	F20
9201	H23
9202	F20
A007	I15
A008	E21
A010	I15
A011	D22
A014	E22
A015	H24
A016	I10
A035	D21
A040	H 8
A043	E20
A044	C20
A045	H24
A046	E24
A054	F14
A055	F14
A060	I19
A062	I18
A071	I 9
A085	H 8
A112	J15
A113	J15
A114	H17
A115	H18
A116	H25
A117	J23

M

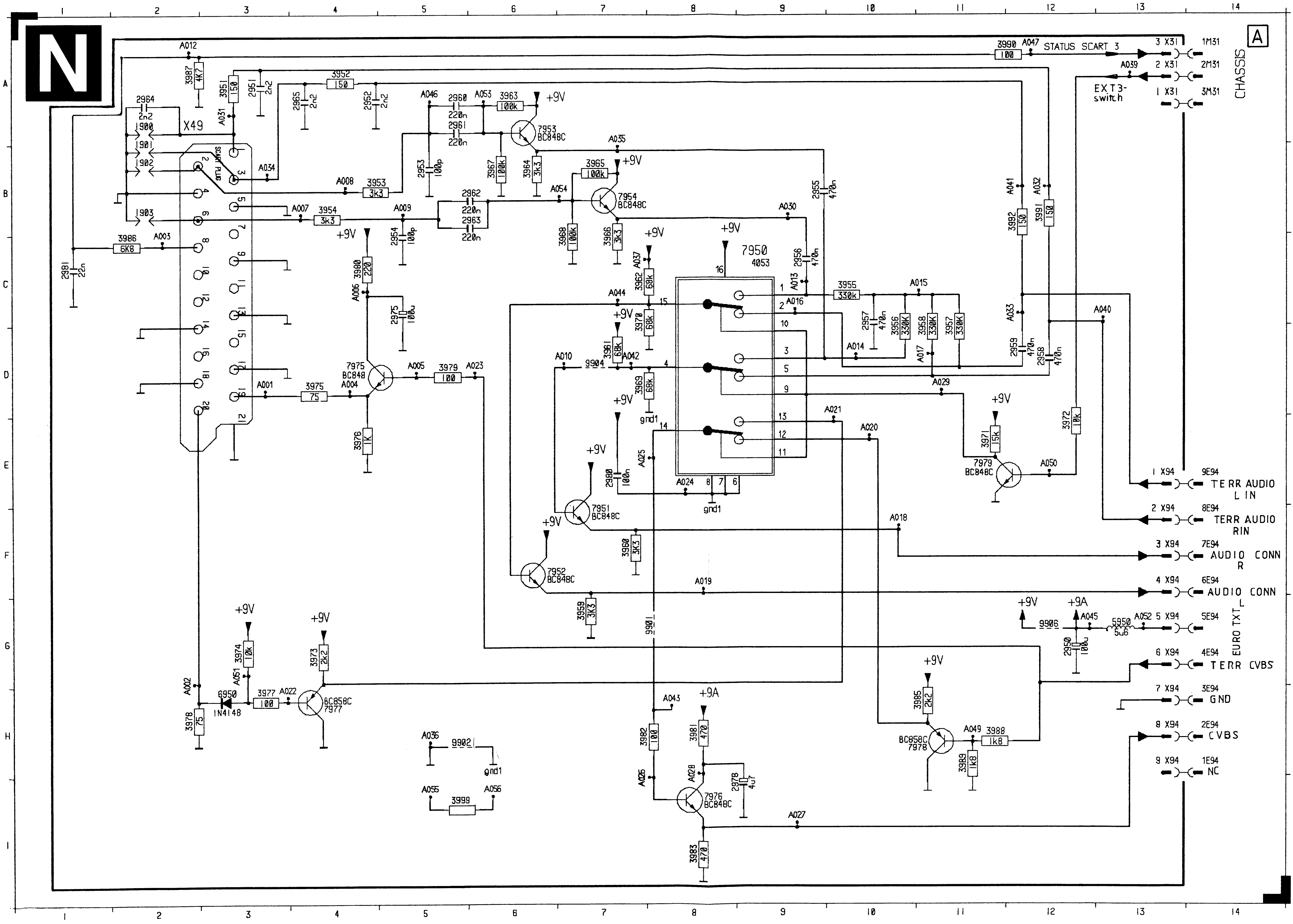

1) : IN GR2-4 ONLY
2) : IN GR2-2 ONLY
3) : BG ONLY
4) : BGDK ONLY
5) : BGLI ONLY
TDA9815
7004
BAND-GAP
TUNER AGC
VIF AGC
AGC DETECTOR AND LOGIC
VIDEO BUFFER AND NOISE CLIPPING
AF-AMP
VIF INPUT SWITCH
3 STAGE VIF AMPLIFIER
FREQUENCY- AND PHASE-DETECTOR
VCO AFC AND TWD
FM-PLL
2 STAGE SIF AMPLIFIER
SIF AGC
AM DEMOD
QSS-MIX AND HIGHPASS
VIDEO DEMOD AND AMP
INPUT SW1
MUTE DEL
IF-VIDEO
QSS
IF-IN
RF-AGC
EXT-VIDEO-IN
AFC
SYS1
SYS2
AF1
AF2
1104 3) 5) OFWG9350
1105 RESERVE
1103 4) OFWK9453 5) OFWL9453
4) 5) OFWK3953 3) OFWG3962 1000
7104 BC848C
7102 BC848C
7103 BC848C
7002 BC848C
7003 BC858C
7005 BC848C
7006 BC858C
7007 BC858C
7009 BC848C
7001 4053
GR2-2 + GR2-4
5.5MHz
4) 6.5MHz 5) 6.0MHz
5.74MHz
SC-CVBS-OUT
VIDEO-IDENT
INT/EXT
CVBS-OUT
M50
M51
M19
G29
G28
G19
B P7
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
IF-IN
INT/EXT
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
SCL
SDA
HEAD-PHONE-L
HEAD-PHONE-R
CHASSIS
CHASSIS OR SEPARATE CONTROL

Module FI-Son Stereo


M
M50
M51
M19
G29
G28
G19
B P7
CHASSIS
CHASSIS OR SEPARATE CONTROL
EXT-VIDEO-IN
RF-AGC
CVBS-OUT
VIDEO-IDENT
SC-CVBS-OUT
SYS1
IF-IN
INT/EXT
AFC
SYS2
SC-AUDIO-OUT-L
SC-AUDIO-OUT-R
SC-AUDIO-IN-L
SC-AUDIO-IN-R
L-OUT
MUTE-2
R-OUT
SCL
SDA
HEAD-PHONE-L
HEAD-PHONE-R
GR2-2 + GR2-4
7001 4053
7008 BC338
6007 LLZ-F5V6
7003 BC858C
7002 BC848C
6002 LL4148
7006 BC858C
7005 BC848C
7009 BC848C
7007 BC858C
TDA9815 7004
VIDEO BUFFER AND NOISE CLIPPING
FREQUENCY- AND PHASE- DETECTOR
VCO, AFC AND TMD
QSS-MIX AND HIGHPASS
VIDEO DEMOD AND AMP
AF-AMP
FM-PLL
INPUT SW
MUTE DEL
5.5MHz
5.74MHz
4) 6.5MHz
5) 6.0MHz
+5V
+8V
+14V
N+5V
N+14Vd
Ngnd5
gnd2
L

1000	F 5	A001	I24
1001	D 9	A002	J25
1100	J10	A003	J25
1101	K10	A004	J25
1102	I10	A005	G23
1103	K 4	A006	G24
1104	H 4	A009	G23
1105	I 4	A012	D21
2000	F 4	A013	D21
2001	F 4	A017	I20
2002	E 6	A018	I20
2003	F 6	A019	C14
2004	C 9	A022	E 8
2005	E19	A023	E 8
2006	G12	A024	E10
2007	E10	A025	E11
2008	E 8	A026	E 9
2009	D 8	A028	K11
2010	D 6	A029	J11
2011	F 5	A032	F 2
2014	C10	A034	I 8
2015	E25	A039	K 7
2016	E 8	A049	I23
2017	E12	A061	C 7
2018	I23	A066	G12
2019	H12	A088	J13
2020	G 4	A089	K14
2100	E11	A091	H13
2101	E10	A092	D 9
2102	E11	A093	K13
2103	E11	A098	E 3
2106	J 2	A099	E 4
2107	I 8	A101	I10
2108	F19	A102	J23
2212	I24	A103	E 7
3000	F 3	A104	F 6
3001	D 7	A105	D 9
3002	D 9	A107	H12
3003	C 9	A110	D10
3004	D14	A111	E 9
3005	C 9	A120	D12
3006	H13	A122	K11
3007	H13	A129	E 7
3008	G13	A130	I11
3009	H12	A132	J 3
3010	G12	A135	I 3
3011	D12	A136	K 3
3012	E12	A138	C11
3013	E 9	A139	C10
3014	D 7	A142	D 8
3015	E 7	A143	K12
3016	D 7	A148	G24
3018	K12	A149	H24
3019	J13	A150	H25
3020	K13	A152	I23
3021	K14	A153	I23
3022	K14	A154	I24
3023	J15	A156	J24
3024	J 8	A157	K24
3025	J15	A159	E21
3026	E23	A160	F21
3027	E24	A164	J23
3029	I15	A165	G25
3030	H16	A168	D14
3031	E 9	A169	C14
3032	K16	A170	I21
3034	K12	A175	E24
3035	G12	A300	F21
3098	F21	G19	J21
3100	J10	G19	K21
3101	K10	G19	J21
3102	I10	G19	J21
3103	G 3	G19	J21
3104	H 3	G28	G21
3106	K 2	G28	I21
3107	L 2	G28	H21
3108	E11	G28	H21
3109	E10	G28	H21
3113	K 2	G28	H21
3114	J 3	G28	H21
3115	K 3	G28	G21
3116	K 3	G28	G21
3117	J 2	G28	G21
3224	I20	G28	I21
3225	I20	G28	I21
4000	D24	G28	I21
4001	H24	G29	D21
4002	I23	G29	F21
4003	G24	G29	F21
4006	F 2	G29	F21
4007	F 4	G29	E21
4008	E21	G29	E21
4022	K14	G29	E21
4023	J13	G29	E21
4034	K11	G29	E21
4041	K14	G29	D21
4100	I 2	G29	D21
4101	G 3	G29	D21
4102	J 3	G29	D21
4103	J 4		
4104	J24		
4202	J25		
4209	J24		
5000	F 2		
5001	D10		
5002	D 9		
5004	F 3		
5100	I 6		
6002	G12		
6003	K 7		
6007	F24		
6100	H 3		
6106	J 3		
6107	J 3		
7001	F15		
7002	H12		
7003	G13		
7004	H 9		
7005	K13		
7006	J14		
7007	I16		
7008	E24		
7009	J15		
7102	K 3		
7103	K 4		
7104	I 3		
9000	D 9		
9001	D 7		
9002	D14		
9003	H24		
9004	I23		
9005	E19		
9006	K23		
9007	F19		
9008	E 8		
9009	E23		
9010	J24		
9011	D24		
9012	K23		
9013	J23		
9014	H23		
9015	H23		
9016	D14		
9017	F 3		
9200	G23		
9203	I23		
9204	J25		
9205	K24		
9206	I25		
9207	G23		
9209	J25		

Third scart module


N
A
CHASSIS
STATUS SCART 3
EXT3-switch
3 X31 1M31
2 X31 2M31
1 X31 3M31
X49
SCART PLUG
1900
1901
1902
1903
2964 2n2
2951 2n2
2965 2n2
2952 2n2
3952 150
3951 150
3987 4K7
3986 6K8
2981 22n
3990 100
3953 3k3
3954 3k3
2953 100p
2954 100p
2960 220n
2961 220n
2962 220n
2963 220n
3963 100k
3967 100k
3964 3K3
7953 BC848C
3965 100k
7954 BC848C
3968 100k
3966 3K3
2955 470n
2956 470n
7950 4053
3962 68k
3970 68k
3961 68k
3969 68k
9904
3955 330k
3956 330K
3958 330K
3957 330K
2957 470n
2959 470n
2958 470n
3992 150
3991 150
3972 10k
3971 15k
7979 BC848C
3980 220
2975 100u
7975 BC848
3975 75
3979 100
3976 1K
2980 100n
7951 BC848C
3960 3K3
7952 BC848C
3959 3K3
9901
3974 10k
3973 2k2
6950 1N4148
3977 100
7977 BC858C
3978 75
9902
3999
gnd1
3982 100
3981 470
2978 4u7
7976 BC848C
3983 470
3985 2k2
7978 BC858C
3988 1k8
3989 1k8
9906
2950 100u
5950 5u6
+9V
+9A
1 X94 9E94 TERR AUDIO L IN
2 X94 8E94 TERR AUDIO RIN
3 X94 7E94 AUDIO CONN R
4 X94 6E94 AUDIO CONN L
5 X94 5E94
6 X94 4E94 TERR CVBS
7 X94 3E94 GND
8 X94 2E94 CVBS
9 X94 1E94 NC
EURO TXT
A001 A002 A003 A004 A005 A006 A007 A008 A009 A010 A012 A013 A014 A015 A016 A017 A018 A019 A020 A021 A022 A023 A024 A025 A026 A027 A028 A029 A030 A031 A032 A033 A034 A035 A036 A037 A039 A040 A041 A042 A043 A044 A045 A046 A047 A049 A050 A051 A052 A053 A054 A055 A056
1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I

1900	A2
1901	B2
1902	B2
1903	B2
2950	G12
2951	A3
2952	A4
2953	B5
2954	C5
2955	B9
2956	C9
2957	C10
2958	D12
2959	D12
2960	A5
2961	A5
2962	B6
2963	B6
2964	A2
2965	A4
2975	C5
2978	I9
2980	E7
2981	C1
3951	A3
3952	A4
3953	B4
3954	B4
3955	C10
3956	D10
3957	D11
3958	D11
3959	G7
3960	F7
3961	D7
3962	C7
3963	A6
3964	B6
3965	B7
3966	C7
3967	B6
3968	C7
3969	D7
3970	C7
3971	E11
3972	E12
3973	G4
3974	G3
3975	D4
3976	E4
3977	H3
3978	H2
3979	D5
3980	C4
3981	H8
3982	H7
3983	I8
3985	H11
3986	C2
3987	A1
3988	H11
3989	H11
3990	A12
3991	B12
3992	B12
3999	I5
5950	G13
6950	H3
7950	C9
7951	F7
7952	F6
7953	A6
7954	B7
7975	D4
7976	I8
7977	H4
7978	H11
7979	E11
9901	G8
9902	H5
9904	D7
9906	G12
A001	D3
A002	G2
A003	C2
A004	D4
A005	D5
A006	C4
A007	B4
A008	B4
A009	B5
A010	D7
A012	A2
A013	C9
A014	D10
A015	C11
A016	C9
A017	D11
A018	F10
A019	F8
A020	E10
A021	D10
A022	H3
A023	D6
A024	E8
A025	E7
A026	I7
A027	I9
A028	H8
A029	D11
A030	B9
A031	A3
A032	B12
A033	C12
A034	B3
A035	A7
A036	H5
A037	C7
A039	A13
A040	C13
A041	B12
A042	D7
A043	H8
A044	C7
A045	G12
A046	A5
A047	A12
A049	H11
A050	E12
A051	G3
A052	G13
A053	A6
A054	B7
A055	I5
A056	I6
X31	A13
X31	A13
X31	A13
X49	A2
X94	E13
X94	F13
X94	F13
X94	F13
X94	G13
X94	G13
X94	H13
X94	H13
X94	H13

7. Elektrische Abgleicharbeiten

Abgleichbedingungen

Alle elektrischen Abgleicharbeiten müssen unter folgenden Bedingungen stattfinden:

- * Speisespannung: 220 - 240 V ± 10%; 50 Hz ± 5%
- * Aufwärmzeit: ca. 10 Minuten
- * Die Spannungen und Oszillogramme werden gegen Tuner-Masse gemessen.
- * Tastkopf: $Ri > 10\ M\Omega$; $Ci < 2{,}5\ pF$.

1. Abgleicharbeiten auf der Trägerplatine

1.1 +148V/+95V-Speisespannung

Ein Voltmeter über C2631 anschließen. Mit R3635 die Speisespannung bei 25"- und 28"-Geräten auf + 148 V ± 0,5 V einstellen und bei 21"-Geräten auf + 95 V ± 0,5 V.

1.2 Fokussierung

Die Fokussierung wird mit dem Fokuspotentiometer (dem obersten auf dem Zeilentransformator) eingestellt.

1.3 Vg2-Einstellung

Einen Bildmustergenerator anschließen und ein Austastsignal (schwarzes Bild) zuführen. Das Gerät auf Service-Default-Betrieb schalten (siehe Kapitel 9). Ein Oszilloskop an die Emitter der Transistoren 7304 und 7364 des Bildröhrenmoduls anschließen. Das Oszilloskop auf die Bildfrequenz einstellen. Den Gleichspannungspegel der Meßimpulse messen (siehe Abb. 7.1). Mit dem Vg2-Potentiometer am Zeilentransformator den Meßimpuls mit dem niedrigsten Gleichspannungspegel einstellen auf:

- * +130 V ± 5 V für alle Geräte.

1.4 Horizontalsynchronisation

Pin 5-IC7470 mit Pin 9-IC7470 verbinden. Ein Antennensignal zuführen und Empfänger abstimmen. Im Service-Menü (siehe Sektion 9), Sync.Frequ. mit der Menü +/- Taste abgleichen bis das Bild glatt ist. Entfernen Sie die Zusammenschaltung.

1.5 Horizontalzentrierung

Die Horizontalzentrierung wird mit Potentiometer 3461 eingestellt.

1.6 Vertikalzentrierung

Die Vertikalzentrierung wird mit Potentiometer 3516 eingestellt.

1.7 Bildhöhe

Die Bildhöhe wird mit Potentiometer 3504 eingestellt.

1.8 Bildbreite

Die Bildbreite wird mit Potentiometer 3525 eingestellt.

1.9 Ost/West-Korrektur

Wird mit Potentiometer 3521 eingestellt.

1.10 Chroma-Bandpaßfilter

a. Einstellung für PAL/SECAM-Geräte (TDA4657)

Einen Signalgenerator (z.B. PM5138) an Pin 20 des Euro-AV-Anschlusses (EXT1) anschließen und die Frequenz auf 4,286 MHz/mV_{RMS} Vpp einstellen. Das Gerät auf EXT1 schalten.
Verbinden an Pin 9-IC7306 ein Oszilloskop. Stellen Sie 5301 auf maximale Amplitude ein. Die Verbindung entfernen.

b. Einstellung für PAL-Geräte (TDA4510)

Einen Signalgenerator (z.B. PM5138) an Pin 20 des Euro-AV-Anschlusses (EXT1) anschließen und die Frequenz auf 4,43 MHz einstellen. Das Gerät auf EXT1 schalten. Ein Oszilloskop an Pin 9-IC7305 (TDA4510) anschließen.
5301 auf die maximale Amplitude einstellen.

1.11 Der Chroma-Hilfsoszillator

Einen Bildmustergenerator anschließen und ein PAL-Farbbalkenmuster zuführen. Pin 11-IC7305 (TDA4510) mit Masse verbinden.
2313 so einstellen, daß die Farbe auf dem Bildschirm praktisch zum Stillstand kommt. Die Verbindung entfernen.

1.12 Weißabgleich

Einen Bildmustergenerator anschließen und ein weißes Bild wählen. Das Service-Menü einschalten (siehe Kapitel 9) und "WHITE BALANCE" wählen.
Die Werte von Grün ("Green") auf 50 einstellen.
Die Werte von Blau ("Bleu") auf 45 einstellen. Die Werte von Rot ("Red") auf 57 einstellen.
Meistens braucht man keine weitere Einstellung.

1.13 Weißpegel-Spitzenbegrenzung

Das Service-Menü einschalten (siehe Kapitel 9) und "WHITE BALANCE" wählen. "WHITE LIMIT" auf folgende Werte einstellen:

- 35 für 'Black-line' Geräte
- 51 für 'non-Black-line' Geräte
- 63 für 21" 110 Grad Geräte
- 45 für 29" Geräte

1.14 Sperrpunkte der Bildröhre

Einen Bildmustergenerator anschließen und ein schwarzes Bild wählen. Das service-Menü einschalten (Abb.9) und "CUT OFF" wählen. Die Werte von Rot ("Red") auf 30; von Grün ("Green") auf 30, und von Blau ("Blue") auf 30 einstellen. Meistens braucht man keine weitere Einstellung.

1.15 Optionen

Das Service-Menü einschalten und "OPTION " oder "OPTION 1" wählen. Die Optionen einschalten ("ON") oder ausschalten ("OFF"), je nachdem, ob folgende Optionen vorhanden sind:

- "THIRD SCART" bei einem Gerät mit drittem Scart
- "TELETEXT" bei einem Gerät mit Videotext
- "MULTI SYSTEM" für Multisystem-Geräte
- "UHF ONLY" für einen Tuner, der nur im UHF-Band abgestimmt werden kann.
- "NICAM" für Stereo-Geräte, die gleichzeitig auch NICAM-Ton empfangen können.

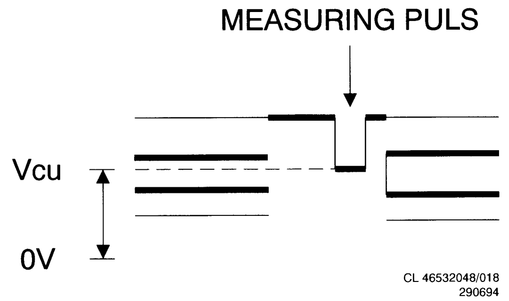


Abb. 7.1

2.1 RF-AGC

Wenn das Bild von einem starken Lokalsender verzerrt wird, können Sie mit der Hilfe von 3016 die Bildverzerrung aufheben.

2.2a MF-AFC

Für Mehrsystem-Geräte (PAL-BG/SECAM-DK). Verbinden Sie einen Mustergenerator an Pin 8 von Stecker G29 (IF-Modul) und wählen Sie eine Frequenz von 38,9 MHz. Verbinden Sie einen Spannungsmesser an Pin 11 von Stecker G 29. Stellen Sie mit 5001 die Direktstromspannung auf 1,9V ein.

2.2b MF-AFC

Für alle anderen Geräte. Verbinden Sie einen Mustergenerator an Pin 8 von Stecker G29 (IF-Modul) und wählen Sie eine Frequenz von 38,9 MHz. Verbinden Sie einen Spannungsmesser an Pin 11 von Stecker G 29. Stellen Sie mit 5001 die Direktstromspannung auf 2,3 V ein.

2.3 Stereo Matrix

Verbinden Sie einen Mustergenerator und speisen Sie ein PAL BG-Signal mit Stereo-Ton. Wählen Sie nur den rechtsgelegenen Kanalton. Aktivieren Sie den Service-Mode. Wählen Sie SND-Stereo und ziehen Sie den rechten Stecker heraus (von der Vorderseite des Gerätes aus gesehen). Stellen Sie die Lautstärke mit dem Tonregler auf das Maximum ein. Gleichen Sie mit dem Menü-Knopf aus, so daß der Ton im linken Lautsprecher gerade nicht zu hören ist. Verlassen Sie jetzt den Service-Mode indem Sie das Gerät in die Bereitschaft schalten.

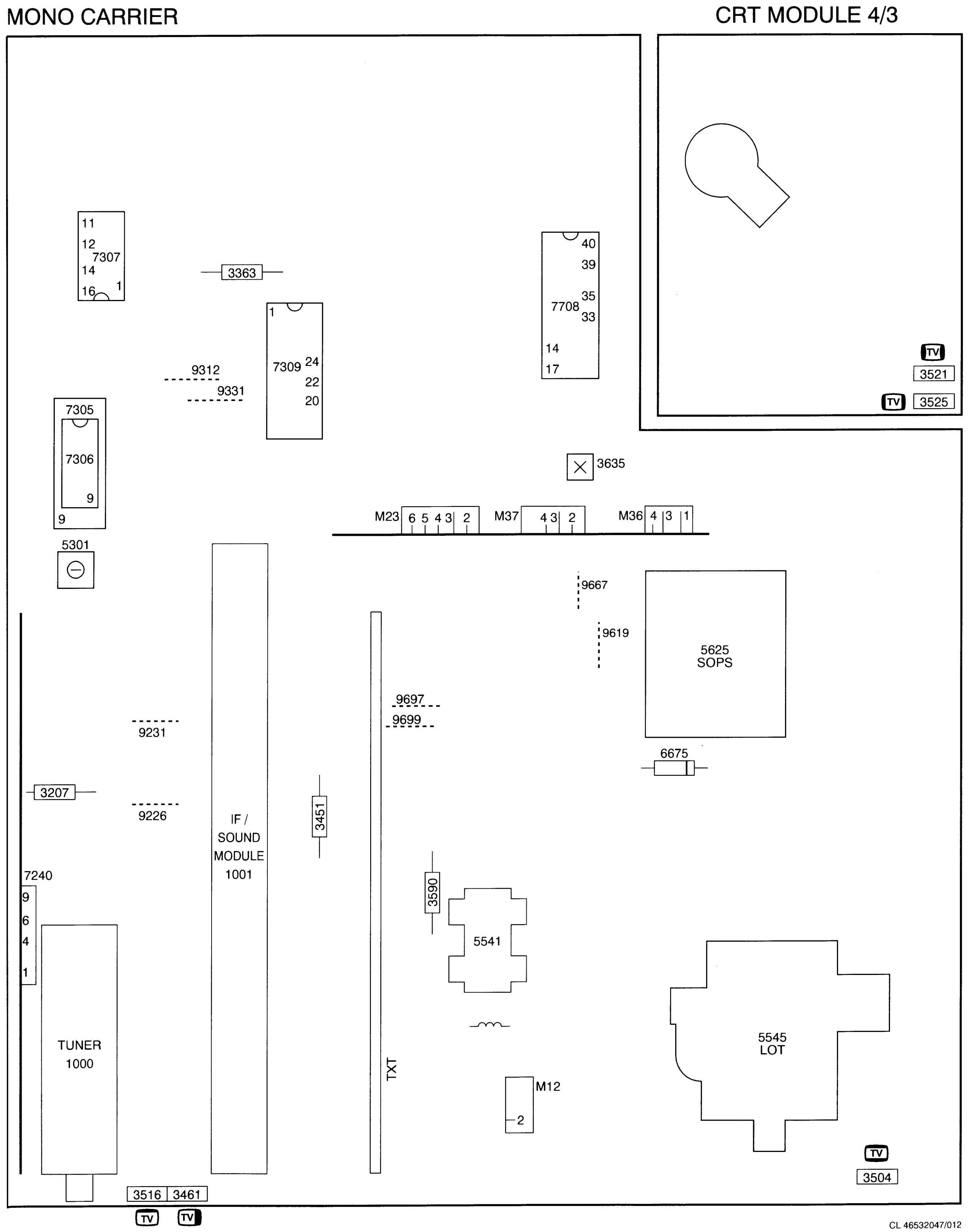
8. Fehlermeldungen Übersicht auf dem Bildschirm

Mitteilung auf dem Bildschirm	Beschreibung	Mögliches Fehler
PIP	I^2C-Fehler PIP-Module	+5 auf PIP-Module, IC7406
NICA	I^2C-Fehler IC7305 (NICAM Geräte)	IC7305, +5 auf ZF-Module
9860	I^2C-Fehler IC7204	+5/+8 auf ZF-Module, IC7305
9840	I^2C-Fehler IC7205	+5/+8 auf ZF-Module, IC7205
TXT	I^2C-Fehler TXT-Module	IC7910/IC7920, +5 auf TXT-Module
EPROM	I^2C-Fehler IC7710	IC7708/IC7710, +5 auf IC's
TUNE	I^2C-Fehler Kanalwähler	+5/+14 auf Kanalwähler, TS7003
CHR1	I^2C-Fehler IC7308	+14 auf IC7308
CHR2	I^2C-Fehler IC7309	+14 auf IC7309
6415	I^2C-Fehler IC7820	
BUS + blinkendes LED	I^2C Bus blockiert	I^2C Bus auf allen ICs kontrollieren

Fehlermeldungen

Interne Mikrocomputer- und externe Fehler werden mit Fehlernummern auf dem Bildschirm (OSD) und mit einem Dauerblinker auf dem LED gemeldet (nur Fehler, die im Zusammenhang mit Video stehen).

Die letzten fünf Fehler werden (falls möglich) im nichtflüchtigen Speicher bewahrt, Fehler-Puffer genannt. Nachdem das System eingeschaltet wurde (über den Netzschalter oder Stand-by) wird nur ein Fehler dem Puffer zugeführt (first-in-first-out-Verfahren). Es werden nur die Fehler dem Puffer zugeführt, die sich von dem zuletzt zum Puffer gesandten Fehler unterscheiden. Der Fehlerpuffer wird freigemacht, wenn das 'Stand-by'-Kommando gegeben wurde während sich das System im Service-Menü-Modus befindet. Ein aktiver Fehler wird ununterbrochen im Service-Default-Modus gezeigt. Der Puffer wird im Service-Menü-Modus gezeigt. (Service-Hauptmenü).



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9. Bedienungsanleitung

1. Service-Default-Mode

Das GR2.4 hat einen Service-Default-Mode, der ein fest definierter Zustand ist, in den das Gerät eingestellt werden kann.

1.1 Definition des Zustands

Der feste Zustand im Service-Default-Betrieb ist folgendermaßen definiert:

- alle Ton- und Bildregler sind auf mittlere Werte eingestellt, (Volumen wird jedoch auf leise eingestellt und Zoom auf Null) in 4/3 Position.
- Gerät wird auf 475,25 MHz abgestimmt.
- System:
  * PAL BG, oder PAL I für Einzelnorm-System Geräte (MULTI-SYSTEM "OFF")
  * SECAM L/DK für Mehrnormen-System Geräte (MULTI-SYSTEM "ON")
  * SECAM DK für Geräte für Ost-Europa (MULTI-SYSTEM "ON")
  * PAL BG für Geräte für Ost-Europa (MULTI-SYSTEM "OFF").

1.2 Ein- und Ausschalten

Der Service-Default-Betrieb wird aktiviert, indem die Pins M33 und M34 (SERVICE) hinter der INSTALL-Taste auf der Trägerplatine während des Einschaltens des Gerätes mit dem Netzschalter kurzgeschlossen werden. Zur Anzeige, daß das Gerät auf Service-Default-Betrieb geschaltet ist, wird auf dem Bildschirm ein "SER" dargestellt.
Der Service-Default-Betrieb kann nur durch Umschalten des Gerätes auf Bereitschaft (⏻) deaktiviert werden. Wenn das Gerät mit dem Netzschalter oder dem Netzstecker aus- und wieder eingeschaltet wird, bleibt der Service-Default-Betrieb weiterhin aktiviert.
Suchen der Senderfrequenz beginnt, nachdem beide "Install" Tasten (Fernbedienung) gleichzeitig betätigt wurden. Bei aktiviertem Service-Menü sind die folgenden Funktionen ausgeschaltet:

- automatisches Abschalten

In diesem Service-Menü kann das Gerät normal bedient werden.

1.3 Bedienung und zusätzliche Möglichkeiten

Neben der normalen Bedienung des Gerätes stehen im Service-Default-Betrieb zwei weitere Funktionen zur Verfügung:

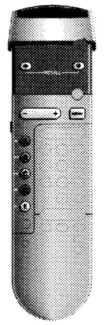
- Servicemenü
  Das Servicemenü wird durch gleichzeitiges Betätigen der Tasten 'Menü" und "-" auf dem lokalen Bedienungsfeld aktiviert (oder durch das Betätigen beider "Install" Tasten auf der Fernbedienung). Danach wird das Service-Menü auf dem Bildschirm angezeigt.
  Das Service-Menü bietet die Möglichkeit, verschiedene Parameter und Bildröhren-Einstellungen vorzunehmen. Die verschiedenen Optionen im Service-Menü können mit den farbigen Tasten der Fernbedienung gewählt werden. Die verschiedenen Parameter werden mit der "Menü +/-" Taste auf der Fernbedienung eingestellt.
  Die eingestellten Werte und Optionen werden, wenn dieses Menü verlassen wird, sofort durch Betätigen der Taste von "Menü on oder Mains off", im EEPROM gespeichert. Mit der Taste "Menü on" gelangen Sie wieder in das "Default" Service-Menü.

Bemerkung 1:
Wenn ein Mehrnormen-Gerät in dem Service-Default-Mode doch mit dem PAL BG System benutzt werden soll, kann die Option "MULTI" vorübergehend ausgeschaltet werden ("OFF").

Bemerkung 2:
Wenn ein Mehrnormen-Gerät für Ost-Europa in dem Service-Default-Mode doch mit dem System PAL BG benutzt werden soll, kann die Option "MULTI" vorübergehend ausgeschaltet werden ("OFF").

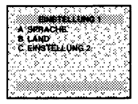
9. Bedienungsanleitung

Aufruf des Einstellungsmenüs



Dieses Menü ermöglicht die Einstellung der Sender am Fernsehgerät.

- ○ Die Klappe der Fernbedienung öffnen.
- ○ Die 2 Tasten ⊕ und ◉ gleichzeitig drücken.
- ▷ Dann wird das Menü **EINSTELLUNG 1** auf dem Bildschirm angezeigt.

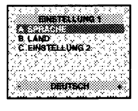

EINSTELLUNG 1
A SPRACHE
B LAND
C EINSTELLUNG 2

Auswahl der Menüsprache

Sie können zwischen mehreren Sprachen für die auf dem Bildschirm angezeigten Menüs wählen.
Sie können **DEUTSCH** oder eine der anderen vorgeschlagenen Sprachen wählen.

Nach Aufruf des Menüs **EINSTELLUNG 1** :

- ○ Die rote Taste Ⓐ drücken.
- ▷ Dann erscheint ein Anzeigefeld unten auf dem Bildschirm.
- ○ Die Taste (− +) zur Wahl der von Ihnen gewünschten Sprache drücken.
- ▷ Der Text aller Menüs wird dann in der von Ihnen gewählten Sprache angezeigt. Dann zur nächsten Einstellung übergehen..

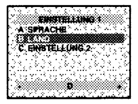

EINSTELLUNG 1
A SPRACHE
B LAND
C EINSTELLUNG 2
DEUTSCH

Wahl des Landes

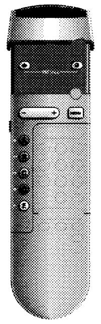
Jetzt wird das Land gewählt, in dem Sie sich befinden.

Nach Aufruf des Menüs **EINSTELLUNG 1** :

- ○ Die grüne Taste Ⓑ drücken.
- ▷ Dann erscheint ein Anzeigefeld unten auf dem Bildschirm.
- ○ Die Taste (− +) zur Wahl des Ihrem Land entsprechenden Buchstabens (D für Deutschland) drücken.
- ▷ Ihre Wahl wird unten auf dem Bildschirm angezeigt. Jetzt können Sie mit der Einstellung der Sender beginnen.

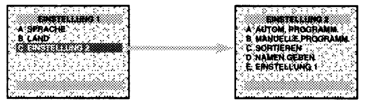

EINSTELLUNG 1
A SPRACHE
B LAND
C EINSTELLUNG 2
D

Suche der Fernsehsender



Vom Menü **EINSTELLUNG 1** aus :

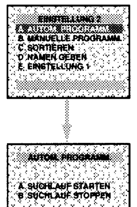
- ○ Die gelbe Taste Ⓒ drücken.
- ▷ Das Menü **EINSTELLUNG 2** wird auf dem Bildschirm angezeigt.


EINSTELLUNG 1
A SPRACHE
B LAND
C EINSTELLUNG 2
EINSTELLUNG 2
A AUTOM. PROGRAMM.
B MANUELLE PROGRAMM.
C SORTIEREN
D NAMEN GEBEN
E EINSTELLUNG 1

Sie haben die Wahl zwischen zwei Methoden :

- **automatische Programmierung** : der Fernseher speichert alle in Ihrem Gebiet empfangbaren Sender. Sie brauchen sie dann nur noch entsprechend Ihren Wünschen zu numerieren.
- **manuelle Programmierung** : Sie müssen die Einstellung der einzelnen Sender selbst vornehmen.

Automatische Programmierung


EINSTELLUNG 2
A AUTOM. PROGRAMM.
B MANUELLE PROGRAMM.
C SORTIEREN
D NAMEN GEBEN
E EINSTELLUNG 1
AUTOM. PROGRAMM.
A SUCHLAUF STARTEN
B SUCHLAUF STOPPEN

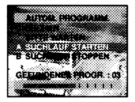
Nach Aufruf des Menüs **EINSTELLUNG 2** (siehe oben) :

- ○ Die rote Taste Ⓐ drücken.
- ▷ Das Menü **AUTOM. PROGRAMM.** wird angezeigt.
- ○ Die rote Taste Ⓐ zum Starten der Suche drücken.
- ▷ Auf dem Bildschirm wird die Meldung **SUCHEN BITTE WARTEN** angezeigt. Der Fernseher durchläuft das gesamte Frequenzband und speichert alle Sender, die er empfängt. Die Suche dauert einige Minuten. Eine horizontale Skala zeigt den Ablauf der Suche an. **Sie müssen warten, bis der waagrechte Balken am Ende der Zeile angekommen ist.**

Wenn die Suche abgeschlossen ist :

blinkt die Meldung **GEFUNDENE PROGR.** und die Gesamtzahl der gefundenen Programme wird angezeigt. Die Sender wurden in der Reihenfolge numeriert, in der sie gefunden wurden. Sie müssen sie daher neu ordnen, um ihnen die von Ihnen gewünschten Nummern zuzuordnen :

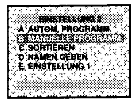
- ○ Die Taste MENU drücken.
- ▷ Das Menü **EINSTELLUNG 2** wird angezeigt. Jetzt können Sie die Sortierung vornehmen : blättern Sie die Seite um und schlagen Sie Kapitel 8 auf.


AUTOM. PROGRAMM.
A SUCHLAUF STARTEN
B SUCHLAUF STOPPEN
GEFUNDENE PROGR. : 03

Manuelle Programmierung

Nach dem Aufruf des Menüs **EINSTELLUNG 2** (siehe vorstehende Seite) :

- ○ Die grüne Taste Ⓑ drücken.
- ▷ Das Menü **MANUELLE PROGRAMM.** wird angezeigt.

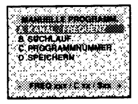

EINSTELLUNG 2
A AUTOM. PROGRAMM.
B MANUELLE PROGRAMM.
C SORTIEREN
D NAMEN GEBEN
E EINSTELLUNG 1

Schritt a

Wahl des Suchlaufs

Dieser Fernseher bietet Ihnen die Möglichkeit den Suchlauf nach Kanal oder Frequenz zu wählen :
Suche nach Kanal (wenn Sie die Sendekanäle der Fernsehsender kennen) oder **Suche nach Frequenz**.

- ○ Die rote Taste Ⓐ drücken.
- ▷ Das untere Band des Menüs wird rot angezeigt.
- ○ Die Taste (− +) zur Wahl der Suchart drücken.
- ▷ Die Angabe **FREQ xxx MHZ** zeigt an, daß die Suche nach Frequenz gewählt ist. Die Angabe **C xx** oder **S xx** zeigt an, daß die Suche nach Kanal gewählt ist. Zum **Schritt b** übergehen.


MANUELLE PROGRAMM.
B SUCHLAUF
C PROGRAMMNUMMER
D SPEICHERN
FREQ xxx / C xx / Sxx

Direkter Aufruf eines Senders

Wenn Sie die Frequenz oder den Kanal des Senders kennen, den Sie empfangen möchten, können Sie die entsprechende Zahl direkt anhand der von ⓪ bis ⑨ numerierten Zahlentasten oder mit der Taste (− P +) eingeben.
Beispiel : bei Suche nach Frequenz müssen Sie für 64 MHz 064 eingeben ;
bei Suche nach Kanal müssen Sie, für C21, 21 eingeben (zur Eingabe von 64,25 MHz nur 064 eingeben; die Feineinstellung erfolgt automatisch).
Direkt zum Schritt C übergehen.

Schritt b

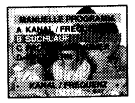
Suchlauf

- ○ Die grüne Taste Ⓑ drücken.
- ▷ Das untere Band des Menüs wird grün angezeigt und der Suchlauf beginnt. Die Frequenz- oder Kanalnummern laufen durch. Sobald ein Sender gefunden wird, hält der Suchlauf an und das Rechteck wird blau angezeigt.

Wenn Sie diesen Sender beibehalten wollen, **gehen Sie zum Schritt C über**.

Wenn Sie diesen Sender nicht behalten wollen :

- ○ Erneut die grüne Taste Ⓑ drücken.
- ▷ Der Suchlauf wird fortgesetzt.


MANUELLE PROGRAMM.
A KANAL / FREQ
B SUCHLAUF
KANAL / FREQUENZ

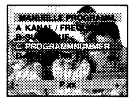
Feineinstellung

Wenn der Empfang eines Fernsehsenders nicht zufriedenstellend ist, können Sie dessen Frequenz oder den Kanal mit der Taste (− +) einjustieren.

Schritt c

Programmnummer

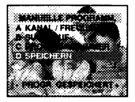
- ○ Die gelbe Taste Ⓒ drücken.
- ▷ Ein Anzeigebereich erscheint unten auf dem Bildschirm.
- ○ Die Taste (− P +) oder die von ⓪ bis ⑨ numerierten Tasten zur Wahl der Programmnummer drücken. Zum **Schritt d** übergehen.


MANUELLE PROGRAMM.
A KANAL / FREQ
C PROGRAMMNUMMER
P xx

Schritt d

Speichern

- ○ Die blaue Taste Ⓓ drücken.
- ▷ Die Angabe **PROGR. GESPEICHERT** wird unten auf dem Bildschirm angezeigt; dann ist der Sender gespeichert.


MANUELLE PROGRAMM.
A KANAL / FREQ
D SPEICHERN
PROGR. GESPEICHERT

erneut

Die Schritte **b**, **c**, **d**
oder **a**, **b**, **c**, **d** wenn Sie den Suchlauf ändern wollen.

Wenn der Sendersuchlauf beendet ist

- ○ Die Taste MENU drücken.
- ▷ Das Menü **EINSTELLUNG 2** wird angezeigt.

Jetzt können Sie den Programmen einen Namen geben :
Umblättern, **zum Kapitel 9**.

Zum Verlassen des Menüs EINSTELLUNG 2 :

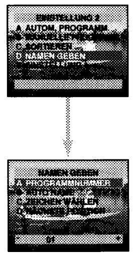
- ○ Erneut die Taste MENU drücken.
Jetzt können Sie Ihren Fernseher benutzen (Seite 9).

Name des Programms

Die ersten 40 Sender Ihres Fernsehers können Sie mit einem aus 5 Zeichen bestehenden Namen bezeichnen (Beispiele : ARD, ZDF...). Dank dieser Funktion kann man den Namen und die Nummer des angezeigten Programms erkennen und anzeigen.

Vom Menü **EINSTELLUNG 2** aus :

- ○ Die blaue Taste Ⓓ drücken.
- ▷ Das Menü **NAMEN GEBEN** wird angezeigt.


EINSTELLUNG 2
A AUTOM. PROGRAMM
C SORTIEREN
D NAMEN GEBEN
NAMEN GEBEN
A PROGRAMMNUMMER
B AUTO NAME
C ZEICHEN WÄHLEN
D NÄCHSTE POSITION
01

Schritt a **Programmnummer**

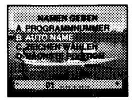
- ○ Die rote Taste Ⓐ zur Wahl der Programmnummer drücken.
- ▷ Die Programmnummer wird unten auf dem Bildschirm angezeigt.
- ○ Verwenden Sie die Taste (− +) oder die von ⓪ bis ⑨ numerierten Tasten zur Wahl des Senders, den Sie mit einem Namen versehen wollen.

Schritt b **Auto Name**

Die Funktion **AUTO NAME** ermöglicht die automatische Eingabe der ersten 5 Zeichen für den Namen des Programms, wenn er im Videotext zur Verfügung steht.

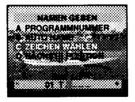
Wenn der Sender auf dem Bildschirm angezeigt ist :

- ○ Die grüne Taste Ⓑ drücken.
- ▷ Das untere Band des Menüs wird grün angezeigt.
- ○ Die Taste (− +) zur Aktivierung der Funktion **AUTO NAME** drücken.
- ▷ Die ersten 5 Zeichen des Programmnamens werden angezeigt. Wenn nichts angezeigt wird, ist der Programmname nicht kodiert, Übergang zum **Schritt C**.


NAMEN GEBEN
A PROGRAMMNUMMER
B AUTO NAME
C ZEICHEN WÄHLEN
01

Schritt c **Zeichen wählen**

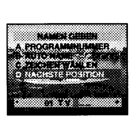
- ○ Die gelbe Taste Ⓒ drücken.
- ▷ Der Anzeigebereich für Zeichen wird angezeigt. Ein Cursor ist auf dem ersten Zeichen positioniert.
- ○ Verwenden Sie die Taste (− +) zur Anzeige (oder Änderung) des ersten Zeichens.


NAMEN GEBEN
A PROGRAMMNUMMER
C ZEICHEN WÄHLEN
01 T

Schritt d **Nächste Position**

Wenn das richtige Zeichen gewählt ist :

- ○ Die blaue Taste Ⓓ zum Verschieben des Cursors drücken.
- ▷ Verwenden Sie die Taste (− +), um ihn nach links oder nach rechts zu verschieben.
- ○ Erneut die gelbe Taste Ⓒ drücken.
- ▷ Verwenden Sie die Taste (− +), um das zweite Zeichen anzuzeigen. Diese Schritte so oft wiederholen, wie Zeichen einzugeben sind.


NAMEN GEBEN
A PROGRAMMNUMMER
C ZEICHEN WÄHLEN
D NÄCHSTE POSITION
01 T V

erneut die Schritte **a**, **b**, **c** und **d** so oft wiederholen wie Programmnamen einzugeben sind.

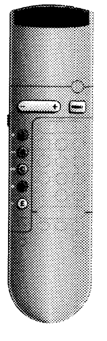
Zum Verlassen des Menüs NAMEN GEBEN :

- ○ Die Taste MENU drücken.
- ▷ Das Menü **EINSTELLUNG 2** wird wieder angezeigt.

Zum Verlassen des Menüs EINSTELLUNG 2 :

- ○ Erneut die Taste MENU drücken.

Aufruf des Hauptmenüs



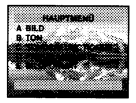
Das Hauptmenü ermöglicht den Zugang zu den Einstellungen und Sonderfunktionen Ihres Fernsehers.

Die Taste MENU ermöglicht den Aufruf oder das Verlassen des Menüs.

Die farbigen Tasten Ⓐ, Ⓑ, Ⓒ, Ⓓ und Ⓔ ermöglichen den Zugang zu den verschiedenen Menüpunkten.
Die Taste (− +) ermöglicht das Durchführen der Einstellungen.

Zum Aufruf des HAUPTMENÜS:

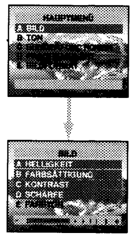
- ○ Die Taste MENU der Fernbedienung drücken.
- ▷ Das **HAUPTMENÜ** wird auf dem Bildschirm angezeigt.


HAUPTMENÜ
A BILD
B TON

Bildeinstellung

Nach Aufruf des **HAUPTMENÜS** (siehe oben) :

- ○ Die rote Taste Ⓐ drücken.
- ▷ Das Menü **BILD** wird auf dem Bildschirm angezeigt.


HAUPTMENÜ
A BILD
B TON
BILD
A HELLIGKEIT
B FARBSÄTTIGUNG
C KONTRAST
D SCHÄRFE
E FARBTON

Helligkeit, Farbsättigung, Kontrast, Schärfe

- ○ Die farbige Taste Ⓐ, Ⓑ, Ⓒ oder Ⓓ entsprechend der Einstellung drücken, die Sie ändern möchten.
- ▷ Eine horizontale Skala wird unten auf dem Bildschirm angezeigt.
- ○ Die Taste (− +) für die Einstellung drücken.
- ▷ Der Cursor bewegt sich entsprechend Ihrer Einstellung.
- ○ Eine der farbigen Tasten für eine andere Einstellung drücken.

Farbton

Die Einstellung des Farbton ermöglicht die Beeinflussung der Farbwiedergabe durch Änderung der Referenz für weiß.

- ○ Die weiße Taste Ⓔ drücken.
- ▷ Eine horizontale Skala wird unten auf dem Bildschirm angezeigt.
- ○ Die Taste (− +) für die Einstellung drücken.
- ▷ Um ein "warmes" Bild zu erhalten (roteres Weiß) : den Cursor auf die maximale Position (+) stellen.
- ▷ Um eine ausgeglichene Farbwiedergabe zu erhalten : den Cursor in die mittlere Position stellen.
- ▷ Um ein "kaltes" Bild zu erhalten (blaueres Weiß) : den Cursor in die minimale Position (-) stellen.

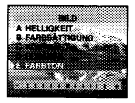


BILD
A HELLIGKEIT
B FARBSÄTTIGUNG
E FARBTON

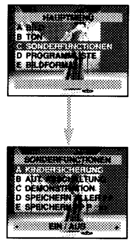
Zum Verlassen des Menüs BILD

- ○ Die Taste MENU drücken.
- ▷ Das **HAUPTMENÜ** wird wieder angezeigt, zur Toneinstellung übergehen.
- ○ Zum Verlassen des **HAUPTMENÜS** die Taste MENU ein zweites Mal drücken.

Sonderfunktionen

Vom **HAUPTMENÜ** aus :

- ○ Die gelbe Taste Ⓒ drücken.
- ▷ Das Menü **SONDERFUNKTIONEN** wird auf dem Bildschirm angezeigt.


HAUPTMENÜ
A BILD
B TON
C SONDERFUNKTIONEN
D PROGRAMMLISTE
E BILDFORMAT
SONDERFUNKTIONEN
A KINDERSICHERUNG
B AUT. ABSCHALTUNG
C DEMONSTRATION
D SPEICHERN ALLER
E SPEICHERN
EIN / AUS

Kindersicherung

Die Funktion der Kindersicherung ist ein elektronischer Schlüssel, der die Tasten des Fernsehers unwirksam macht. Diese Funktion ermöglicht es Ihnen, die Benutzung des Fernsehers zu sperren (z.B. für die Kinder). Dazu brauchen Sie nur die Verriegelung zu aktivieren und die Fernbedienung zu verstecken und der Fernseher kann nicht benutzt werden.

Vom Menü **SONDERFUNKTIONEN** aus :

- ○ Die rote Taste Ⓐ drücken.
- ▷ Die Angabe **AUS** wird unten auf dem Bildschirm angezeigt.
- ○ Die Taste (− +) drücken.
- ▷ Die Angabe **EIN** wird angezeigt. Die Tasten des Fernsehers werden unwirksam.

Zur Funktionskontrolle :

- ○ Die Taste ⏻ zum Ausschalten vorne am Fernseher drücken.
- ○ Die Taste ⏻ erneut zum Einschalten drücken.
- ▷ Der Fernseher bleibt in Bereitschaftsposition (die Kontrollampe leuchtet rot).
- ○ Die Tasten des Fernsehers betätigen.
- ▷ Die Angabe **KINDERSICHERUNG** wird kurz auf dem Bildschirm angezeigt und der Bildschirm bleibt dunkel.
Jetzt kann der Fernseher nur noch mit der Fernbedienung eingeschaltet werden.

Zur Aufhebung der Kindersicherung :

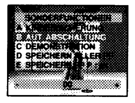
- ○ Die Einstellung neu durchführen und die Anzeige des Menüs auf **AUS** stellen.

Automatische Abschaltung

Diese Funktion ermöglicht die Programmierung für ein automatisches Abschalten des Fernsehers.

Vom Menü **SONDERFUNKTIONEN** aus :

- ○ Die grüne Taste Ⓑ drücken.
- ▷ Unten auf dem Bildschirm wird 00 angezeigt.
- ○ Die Taste (− +) für die Programmierung der Einschaltdauer drücken.
- ▷ Nach jedem Drücken wird die Einschaltdauer um 15 Minuten erhöht (bis maximal 90).
- ○ Zum Verlassen des Menüs die Taste MENU zweimal drücken.
- ▷ Der Fernseher schaltet nach abgelaufener Zeit automatisch in die Bereitschaftsposition.


SONDERFUNKTIONEN
B AUT. ABSCHALTUNG
C DEMONSTRATION
D SPEICHERN ALLER
E SPEICHERN
00

Für die Anzeige der noch verbleibenden Einschaltdauer :

- ○ Die Taste ⊕ drücken.
- ▷ Die noch verbleibende Einschaltdauer wird kurzzeitig auf dem Bildschirm angezeigt.

Zur Aufhebung der Programmierung :

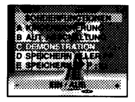
- ○ Die Einstellung neu durchführen und die Anzeige des Menüs auf 00 stellen.

Demonstration

Die Betriebsart **DEMONSTRATION** löst die automatische Anzeige aller Menüs des Fernsehers aus.

Vom Menü **SONDERFUNKTIONEN** aus :

- ○ Die gelbe Taste Ⓒ drücken.
- ▷ Die Angabe **AUS** wird unten auf dem Bildschirm angezeigt.
- ○ Die Taste (− +) zum Einschalten der Betriebsart **DEMONSTRATION** drücken.
- ▷ Die Angabe **DEMONSTRATION** wird angezeigt, die Menüs **BEDIENUNG** und **EINSTELLUNG** laufen automatisch nacheinander ab.


SONDERFUNKTIONEN
B AUT.
C DEMONSTRATION
D SPEICHERN ALLER
E SPEICHERN
EIN / AUS

Zur Unterbrechung der Betriebsart DEMONSTRATION :

- ○ Die Taste MENU drücken.

Programmliste

Dieses Menü ermöglicht die Auflistung der Namen und Nummern der ersten 40 Programme, die Sie im Menü **EINSTELLUNG** gespeichert haben.

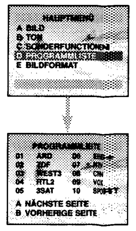
- ○ Die Taste MENU drücken.
- ▷ Das **HAUPTMENÜ** wird auf dem Bildschirm angezeigt.
- ○ Die blaue Taste Ⓓ drücken.
- ▷ Das Menü **PROGRAMMLISTE** wird auf dem Bildschirm mit der Liste der ersten 10 Programme angezeigt.

Für die Anzeige der nächsten Seite :

- ○ Die rote Taste Ⓐ drücken.

Für die Anzeige der vorherigen Seite :

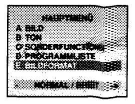
- ○ Die grüne Taste Ⓑ drücken.


HAUPTMENÜ
A BILD
B TON
C SONDERFUNCTIONEN
D PROGRAMMLISTE
E BILDFORMAT
PROGRAMMLISTE
01 ARD
02 ZDF
03 WEST3
04 RTL2
05 3SAT
07
08 CNN
09 VOX
10 SPORT
A NÄCHSTE SEITE
B VORHERIGE SEITE

Bildformat

Diese Funktion ermöglicht die Anpassung des Bildformates 16/9 an Ihren Bildschirm (4/3).

- ○ Die Taste MENU drücken.
- ▷ Das **HAUPTMENÜ** wird auf dem Bildschirm angezeigt.
- ○ Die weiße Taste Ⓔ drücken.
- ▷ Die Angabe **NORMAL** wird unten auf dem Bildschirm angezeigt.
- ○ Die Taste (− +) drücken.
- ▷ Die Angabe **BREIT** wird angezeigt, und ein schwarzer Streifen erscheint oben und unten auf dem Bildschirm. Das Bild wird im Format 16/9 wiedergegeben.


HAUPTMENÜ
A BILD
B TON
C SONDERFUNCTIONEN
D PROGRAMMLISTE
E BILDFORMAT
NORMAL / BREIT

Programmierbare Tasten

Die Fernbedienung besitzt zwei blaue, programmierbare Tasten ⊖ und ⊕.
Wenn Sie regelmäßig die gleiche Einstellung der Menüs aufrufen (z.B. Spatial, Lautstärke des Kopfhörers, Helligkeit, ...), können Sie einen direkten Zugang einer dieser Einstellungen programmieren.

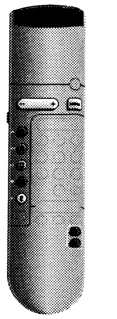
- ○ Die Taste MENU drücken.
- ▷ Das **HAUPTMENÜ** wird auf dem Bildschirm angezeigt.

Wählen Sie die Einstellung, die Sie programmieren möchten.
Wenn Sie z.B. den Raumeffekt programmieren wollen :

- ○ Die grüne Taste Ⓑ zum Aufruf des Menüs **TON** drücken.
- ○ Die blaue Taste Ⓓ zur Wahl von **SPATIAL** (Raumeffekt) drücken.
- ▷ Die Angabe **AUS** oder **EIN** wird unten auf dem Bildschirm angezeigt.
- ○ Verwenden Sie für die Einstellung die blauen Tasten ⊖ und ⊕ anstatt der Taste (− +).
- ▷ Der Ton wird geändert, und die Tasten ⊖ und ⊕ werden automatisch programmiert.
- ○ Drücken Sie zweimal die Taste MENU, um das Menü zu verlassen.

Zur Funktionskontrolle :

- ○ Die blauen Tasten ⊖ und ⊕ drücken.
- ▷ Bei jeder Betätigung wird der Raumeffekt ein- oder abgeschaltet. Jetzt können Sie den Raumeffekt direkt mit diesen beiden Tasten einstellen, ohne die Menüs aufzurufen.
Diesen Vorgang für die Einstellung Ihrer Wahl wiederholen.



10. Spare parts list / Stükliste / Liste des pièces

Main carrier [A/B/C/D]

Various

▲	4822 265 30389	2P male vert yellow
	4822 264 40207	3P male vert WTB
	4822 267 40666	3P male vert blue
	4822 264 40239	3P male vert green
▲	4822 265 30877	3P male vert
	4822 267 40696	3P male vert white
	4822 267 41113	3P female hor white
	4822 267 31694	3P female hor blue
	4822 267 40794	3P female vert grey WTB
	4822 267 40699	4P male vert red
	4822 265 30378	4P male vert WTB
	4822 290 40283	5P male vert green
	4822 265 40421	6P male vert WTB
	4822 267 30546	6P female vert grey
	4822 267 50621	7P male vert white
▲	4822 267 60243	Euroconnector (scart) blue
▲	4822 256 92053	Fuse holder
	4822 256 91879	Holder
▲	4822 502 13712	Screw 12x3
	4822 492 70871	Spring
	4822 492 70143	Spring 10x33
	4822 466 30395	Shield microprocessor
1000	4822 210 10436	U944C/IEC
1000	4822 210 10611	UV916M
1240▲	4822 252 51174	Fuse 1.6A 65V
1242▲	4822 252 51174	Fuse 1.6A 65V
1300	4822 242 81807	8.867570 MHz
1301	4822 242 70304	8.867238 MHz
1534▲	4822 252 51172	Fuse 3.15A 65V
1559▲	4822 252 51173	Fuse 1A 65V
1563	4822 526 10405	Bead
1564	4822 526 10405	Bead
1580▲	4822 252 51174	Fuse 1.6A 65V
1600▲	4822 070 32502	Fuse 2.5A 65V
1601▲	4822 252 51175	Fuse 2.5A 65V
1640	4822 526 10405	Bead
1641	4822 526 10405	Bead
1642	4822 526 10405	Bead
1643	4822 526 10405	Bead
1702	4822 242 81841	8MHz

⊣⊢

2001	4822 124 40214	1000μF 20% 25V
2002	4822 122 31797	22nF 10% 63V
2003	4822 122 33496	100nF 10% 63V
2005▲	4822 124 40196	220μF 20% 16V
2010	4822 124 40248	10μF 20% 63V
2012	4822 122 31768	180pF 2% 63V
2231▲	4822 124 41525	100μF 20% 25V
2232	4822 122 31797	22nF 10% 63V
2236	4822 122 31644	2.2nF 10% 63V
2236	4822 122 31784	4.7nF 10% 50V
2237	4822 122 31947	100nF 20% 63V
2238	4822 122 32153	1.8nF 10% 63V
2238	4822 122 33498	2.7nF 10% 63V
2239	4822 122 31947	100nF 20% 63V
2240	4822 124 40214	1000μF 20% 25V
2241	5322 121 42386	100nF 5% 63V
2242	4822 124 40214	1000μF 20% 25V
2243	4822 121 41856	22nF 5% 250V
2245	4822 121 41856	22nF 5% 250V
2246	4822 124 41596	22μF 20% 50V
2248	4822 124 40849	330μF 20% 16V
2249	4822 122 31797	22nF 10% 63V
2252	4822 121 41857	10nF 5% 250V
2253	4822 121 41857	10nF 5% 250V
2254	4822 121 51252	470nF 5% 63V
2255	4822 121 51252	470nF 5% 63V
2256	4822 122 32142	270pF 2% 63V
2257	4822 122 32142	270pF 2% 63V
2258	4822 121 51252	470nF 5% 63V
2259	4822 121 51252	470nF 5% 63V
2260	4822 122 31116	2.2nF 10% 500V
2261	4822 122 31116	2.2nF 10% 500V
2300	4822 122 32482	22pF 2% 63V
2301	4822 122 32999	2.2nF 5%
2303	4822 122 31768	180pF 2% 63V
2304	4822 122 31773	560pF 2% 63V
2304	4822 122 32999	2.2nF 5%
2305	4822 126 10324	33pF 2% 63V
2306	4822 122 31965	220pF 2% 63V
2307	4822 122 33496	100nF 10% 63V
2308	4822 122 31797	22nF 10% 63V
2310	4822 121 41857	10nF 5% 250V
2310	4822 121 42408	220nF 5% 63V
2311	4822 122 33496	100nF 10% 63V
2312	4822 121 41857	10nF 5% 250V
2312	4822 121 42408	220nF 5% 63V
2313	4822 125 50045	1p8-22p 250V
2314	5322 121 42661	330nF 5% 63V
2314	5322 122 32818	2.2nF 10% 100V
2315	4822 122 31825	27pF 2% 63V
2316	4822 122 33496	100nF 10% 63V
2319▲	4822 122 32442	10nF 50V
2321	4822 122 31797	22nF 10% 63V
2322	4822 122 31797	22nF 10% 63V
2323	4822 122 32542	47nF 10% 63V
2325	4822 122 31965	220pF 2% 63V
2325	4822 122 32542	47nF 10% 63V
2326	4822 122 31839	82pF 2% 63V
2328▲	4822 122 32442	10nF 50V
2329▲	4822 122 32442	10nF 50V
2330	4822 122 33496	100nF 10% 63V
2331	4822 122 33496	100nF 10% 63V
2332	4822 122 33496	100nF 10% 63V
2333	4822 122 33496	100nF 10% 63V
2334	4822 122 33496	100nF 10% 63V
2336	4822 122 31797	22nF 10% 63V
2337	4822 122 31797	22nF 10% 63V
2338	4822 122 31797	22nF 10% 63V
2339	4822 122 33496	100nF 10% 63V
2340	4822 122 31797	22nF 10% 63V
2341	4822 122 31797	22nF 10% 63V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 122 33496	100nF 10% 63V
2345	4822 122 31797	22nF 10% 63V
2348▲	4822 124 40196	220μF 20% 16V
2349	5322 122 31647	1nF 10% 63V
2350▲	4822 124 40433	47μF 20% 25V
2351	4822 122 31797	22nF 10% 63V
2352	5322 122 31647	1nF 10% 63V
2353	4822 122 33496	100nF 10% 63V
2354	4822 124 40242	1μF 20% 63V
2355	4822 124 40849	330μF 20% 16V
2356	4822 122 31797	22nF 10% 63V
2357	4822 122 31797	22nF 10% 63V
2358	4822 122 31797	22nF 10% 63V
2359	4822 122 31765	100pF 2% 63V
2360	4822 122 33496	100nF 10% 63V
2361	4822 122 33496	100nF 10% 63V
2362	4822 122 33496	100nF 10% 63V
2363	4822 122 31765	100pF 2% 63V
2365	5322 121 42661	330nF 5% 63V
2366	4822 124 40248	10μF 20% 63V
2367	4822 124 40753	6.8μF 20% 63V
2368	4822 126 13094	11pF 2% 63V
2369	4822 121 51252	470nF 5% 63V
2370	4822 121 42408	220nF 5% 63V
2374	4822 122 31772	47pF 2% 63V
2378	4822 122 33496	100nF 10% 63V
2385	4822 122 31772	47pF 2% 63V
2386	4822 122 33481	1800pF 2% 63V
2451	4822 122 33496	100nF 10% 63V
2453	5322 124 41431	22μF 20% 35V
2455	5322 122 31647	1nF 10% 63V
2456	4822 124 40242	1μF 20% 63V
2457	4822 122 33496	100nF 10% 63V
2458	4822 121 42937	2.7nF 1% 250V
2459	4822 122 33496	100nF 10% 63V
2460	4822 122 32566	3.9nF 10% 63V
2460	4822 122 33498	2.7nF 10% 63V
2461	5322 122 31647	1nF 10% 63V
2462	4822 122 31797	22nF 10% 63V
2464	4822 122 33496	100nF 10% 63V
2465	4822 124 40198	470μF 20% 16V
2466	4822 124 40248	10μF 20% 63V
2467	4822 122 33496	100nF 10% 63V
2468	4822 124 22652	2.2μF 20% 50V
2469	4822 124 41596	22μF 20% 50V
2470	4822 122 31772	47pF 2% 63V
2471	5322 121 42661	330nF 5% 63V
2473	5322 121 42661	330nF 5% 63V
2475	5322 122 31647	1nF 10% 63V
2476▲	4822 122 32442	10nF 50V
2500	4822 122 31773	560pF 2% 63V
2501	4822 122 33481	1800pF 2% 63V
2502	5322 124 41381	22μF 20% 50V
2503▲	4822 122 32442	10nF 50V
2505	4822 122 32542	47nF 10% 63V
2506	4822 124 80065	1000μF 20% 50V
2507	4822 122 31797	22nF 10% 63V
2509	4822 121 51319	1μF 10% 63V
2524	4822 124 42167	4.7μF 20% 50V
2539	4822 124 40198	470μF 20% 16V
2543	4822 122 31784	4.7nF 10% 50V
2544	4822 122 32183	56nF 10% 50V
2545▲	4822 126 12273	1200pF 10%R(HR) 2KV
2545▲	4822 126 12274	1500pF 10%R(HR) 2KV
2546▲	4822 121 70434	11nF 5% 1.6KV
2546▲	4822 121 70538	13nF 5% 1.6KV
2547▲	4822 121 42934	27nF 10% 400V
2547▲	5322 121 44219	47nF 10% 400V
2548	4822 121 41856	22nF 5% 250V
2549▲	4822 121 42074	470 nF 10% 400V
2550▲	4822 121 51528	470nF 5% 250V
2550▲	5322 121 44128	680nF 10% 250V
2551	4822 124 80069	1μF 20% 160V
2552	4822 122 33496	100nF 10% 63V
2559	4822 124 80059	100μF 20% 25V
2560▲	4822 121 51408	33nF 10% 250V
2561	4822 122 31766	120pF 2% 63V
2570	4822 124 80071	22μF 20% 160V
2574	4822 122 30057	2.7nF 10% 100V
2580	4822 124 80061	1000μF 20% 25V
2588	4822 051 10008	0R00 5% 0.25W
2590	5322 121 42498	680nF 5% 63V
2600▲	4822 121 70285	470nF 10% 250V
2605	4822 124 23492	220μF 50% 385V
2605▲	4822 124 80728	150μF 20% 385V
2607▲	4822 121 51469	1nF 400V
2608	4822 122 31965	220pF 2% 63V
2612	5322 122 31647	1nF 10% 63V
2617	4822 121 51252	470nF 5% 63V
2617	4822 121 51319	1μF 10% 63V
2620	5322 121 42465	68nF 5% 63V
2625▲	4822 126 12272	1nF 10%R(HR) 2KV
2626▲	4822 126 12267	470pF 10%R(HR) 2KV
2630	4822 124 23418	47μF 200V
2630	4822 124 42448	100μF 20% 200V
2631	4822 124 23418	47μF 200V
2631	4822 124 42448	100μF 20% 200V
2632▲	4822 126 11382	1nF 10% 1KV
2640	4822 124 80061	1000μF 20% 25V
2641	4822 124 80061	1000μF 20% 25V
2652	5322 122 32331	1nF 10% 100V
2653	5322 122 32331	1nF 10% 100V
2658	5322 122 32838	82nF 10% 63V
2660	4822 124 80061	1000μF 20% 25V
2672	5322 124 41379	2.2μF 20% 50V
2675	4822 124 80064	680μF 20% 50V
2675	4822 124 80065	1000μF 20% 50V
2676	5322 122 32331	1nF 10% 100V
2700	4822 124 40248	10μF 20% 63V
2704	4822 122 32542	47nF 10% 63V
2705	4822 122 31766	120pF 2% 63V
2706	4822 124 41643	100μF 20% 16V
2707▲	4822 122 32442	10nF 50V
2708	4822 122 31766	120pF 2% 63V
2709	4822 122 32139	12pF 2% 63V
2710	4822 122 32139	12pF 2% 63V
2711	4822 122 31825	27pF 2% 63V
2712	4822 122 31825	27pF 2% 63V
2713▲	4822 124 41525	100μF 20% 25V
2716	4822 122 33496	100nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	5322 121 42386	100nF 5% 63V
2721	4822 122 31784	4.7nF 10% 50V
2722	4822 122 33496	100nF 10% 63V
2853	4822 121 43856	4.7nF 5% 250V
2854	4822 122 33496	100nF 10% 63V
2860	4822 124 40248	10μF 20% 63V

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3001▲	4822 052 10399	39Ω 5% 0.33W
3002	4822 116 52257	22k 5% 0.5W
3003	4822 116 52296	6k8 5% 0.5W
3009	4822 116 52175	100Ω 5% 0.5W
3010	4822 116 52175	100Ω 5% 0.5W
3200	4822 051 10223	22k 2% 0.25W
3201	4822 051 10562	5k6 2% 0.25W
3202	4822 051 10122	1k2 2% 0.25W
3203▲	4822 116 52233	10k 5% 0.5W
3204	4822 051 10101	100Ω 2% 0.25W
3205	4822 051 10223	22k 2% 0.25W
3206	4822 051 10562	5k6 2% 0.25W
3207	4822 116 52207	1k2 5% 0.5W
3208	4822 116 52228	680Ω 5% 0.5W
3208▲	4822 116 52263	2k7 5% 0.5W
3209	4822 116 52228	680Ω 5% 0.5W
3209▲	4822 116 52263	2k7 5% 0.5W
3220	4822 051 10392	3k9 2% 0.25W
3222	4822 116 52234	100Ω 5% 0.5W
3223	4822 051 10109	10Ω 2% 0.25W
3224	4822 051 20222	2k2 5% 0.1W
3225	4822 051 10272	2k7 2% 0.25W
3226	4822 051 10333	33k 2% 0.25W
3227	4822 051 10333	33k 2% 0.25W
3228	4822 116 52211	150Ω 5% 0.5W
3229	4822 051 10562	5k6 2% 0.25W
3230	4822 051 10223	22k 2% 0.25W
3231▲	4822 051 10472	4k7 2% 0.25W
3240▲	4822 052 10828	8Ω2 5% 0.33W
3241▲	4822 052 10828	8Ω2 5% 0.33W
3242	4822 051 10563	56k 2% 0.25W
3243	4822 051 10563	56k 2% 0.25W
3244▲	4822 051 10103	10k 2% 0.25W
3245▲	4822 051 10103	10k 2% 0.25W
3250	4822 116 80175	4k7 5% 0.5W
3251	4822 116 80175	4k7 5% 0.5W
3253	4822 116 52211	150Ω 5% 0.5W
3254	4822 116 52211	150Ω 5% 0.5W
3300	4822 051 10822	8k2 2% 0.25W
3301	4822 051 10272	2k7 2% 0.25W
3302	4822 051 20222	2k2 5% 0.1W
3303	4822 051 10122	1k2 2% 0.25W
3303	4822 051 10392	3k9 2% 0.25W
3304	4822 051 10182	1k8 2% 0.25W
3305	4822 051 10431	430Ω 2% 0.25W
3306▲	4822 116 52233	10k 5% 0.5W
3307	4822 051 10561	560Ω 2% 0.25W
3307	4822 051 10681	680Ω 2% 0.25W
3308	4822 051 20183	18k 5% 0.1W
3309	4822 051 10562	5k6 2% 0.25W
3310▲	4822 051 10472	4k7 2% 0.25W
3311▲	4822 051 10103	10k 2% 0.25W
3312	4822 051 10331	330Ω 2% 0.25W
3313	4822 051 10274	270k 2% 0.25W
3314▲	4822 116 52233	10k 5% 0.5W
3318	4822 116 52224	470Ω 5% 0.5W
3319▲	4822 051 10103	10k 2% 0.25W
3321	4822 051 10473	47k 2% 0.25W
3323	4822 116 52305	820k 5% 0.5W
3324	4822 051 10331	330Ω 2% 0.25W
3325	4822 116 52175	100Ω 5% 0.5W
3326	4822 051 10101	100Ω 2% 0.25W
3327	4822 051 10331	330Ω 2% 0.25W
3328	4822 051 10102	1k 2% 0.25W
3329▲	4822 116 52256	2k2 5% 0.5W
3330	4822 051 10109	10Ω 2% 0.25W
3331	4822 051 10109	10Ω 2% 0.25W
3332	4822 050 15609	56Ω 1% 0.4W
3333	4822 051 20222	2k2 5% 0.1W
3334▲	4822 053 11279	27Ω 5% 2W
3334	4822 053 11399	39Ω 5% 2W
3335	4822 116 52226	560Ω 5% 0.5W
3336▲	4822 052 10479	47Ω 5% 0.33W
3342▲	4822 051 10103	10k 2% 0.25W
3343	4822 051 10473	47k 2% 0.25W
3346	4822 051 10332	3k3 2% 0.25W
3347▲	4822 116 52219	330Ω 5% 0.5W
3348▲	4822 116 52219	330Ω 5% 0.5W
3349▲	4822 116 52219	330Ω 5% 0.5W
3350	4822 050 11002	1k 1% 0.4W
3356▲	4822 050 21008	1Ω 1% 0.6W
3358	4822 051 10331	330Ω 2% 0.25W
3359▲	4822 116 52219	330Ω 5% 0.5W
3361	4822 051 10101	100Ω 2% 0.25W
3362	4822 051 10102	1k 2% 0.25W
3363	4822 116 52175	100Ω 5% 0.5W
3364	4822 050 21502	1k5 1% 0.6W
3366	4822 116 52297	68k 5% 0.5W
3367	4822 116 52175	100Ω 5% 0.5W
3368	4822 116 52175	100Ω 5% 0.5W
3369	4822 116 52175	100Ω 5% 0.5W
3370▲	4822 051 10472	4k7 2% 0.25W
3371	4822 051 10332	3k3 2% 0.25W
3375	4822 051 10109	10Ω 2% 0.25W
3376	4822 051 10109	10Ω 2% 0.25W
3380	4822 051 10101	100Ω 2% 0.25W
3381	4822 051 10101	100Ω 2% 0.25W
3385	4822 051 10102	1k 2% 0.25W
3450	4822 116 52238	12k 5% 0.5W
3451	4822 116 52175	100Ω 5% 0.5W
3453	4822 116 52251	18k 5% 0.5W
3454	4822 050 11002	1k 1% 0.4W
3455	4822 051 10122	1k2 2% 0.25W
3456▲	4822 051 10103	10k 2% 0.25W
3457	4822 116 83726	27k 5% 0.125W
3458	4822 117 11455	7k87 1%
3459	4822 116 52304	82k 5% 0.5W
3460	4822 116 52271	33k 5% 0.5W
3461	4822 100 10436	22k CARB LIN 0.1W
3462	4822 116 52257	22k 5% 0.5W
3463	4822 116 52251	18k 5% 0.5W
3464	4822 051 10123	12k 2% 0.25W

BTB = Board To Board; WTB = Wire To Board

3465	4822 051 10394	390k 2% 0.25W
3466	4822 051 10681	680Ω 2% 0.25W
3467	4822 053 20275	2M7 5% 0.25W
3467	4822 053 20335	3M3 5% 0.25W
3468	4822 051 10682	6k8 2% 0.25W
3469	4822 051 10229	22Ω 2% 0.25W
3470▲	4822 116 52233	10k 5% 0.5W
3471	4822 116 52239	120k 5% 0.5W
3471	4822 116 52285	470k 5% 0.5W
3473	4822 116 52265	270k 5% 0.5W
3474	4822 051 10562	5k6 2% 0.25W
3475	4822 051 10184	180k 2% 0.25W
3476	4822 051 10104	100k 2% 0.25W
3477	4822 051 10008	0Ω 5% 0.25W
3477	4822 051 10228	2Ω2 5% 0.25W
3478	4822 051 10008	0Ω 5% 0.25W
3478	4822 051 10478	4Ω7 5% 0.25W
3479▲	4822 116 52219	330Ω 5% 0.5W
3480	4822 050 11002	1k 1% 0.4W
3481▲	4822 116 52283	4k7 5% 0.5W
3482▲	4822 116 52283	4k7 5% 0.5W
3483▲	4822 052 10339	33Ω 5% 0.33W
3484	4822 051 20183	18k 5% 0.1W
3485	4822 051 10682	6k8 2% 0.25W
3486	4822 051 10182	1k8 2% 0.25W
3487	4822 116 52231	820Ω 5% 0.5W
3488	4822 051 10471	470Ω 2% 0.25W
3489	4822 051 10008	0Ω 5% 0.25W
3490	4822 116 52296	6k8 5% 0.5W
3501	4822 051 10229	22Ω 2% 0.25W
3501	4822 051 10279	27Ω 2% 0.25W
3502▲	4822 053 10122	1k2 5% 1W
3502▲	4822 053 10272	2k7 5% 1W
3503▲	4822 052 10128	1Ω2 5% 0.33W
3503▲	4822 052 10478	4Ω7 5% 0.33W
3504	4822 100 11684	100Ω 10% 0.1W
3505	4822 051 10471	470Ω 2% 0.25W
3506	4822 051 10334	330k 2% 0.25W
3507	4822 051 10223	22k 2% 0.25W
3507	4822 051 10273	27k 2% 0.25W
3508	4822 051 10228	2Ω2 5% 0.25W
3509	4822 051 10228	2Ω2 5% 0.25W
3510	4822 051 10228	2Ω2 5% 0.25W
3511	4822 051 10228	2Ω2 5% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3513▲	4822 053 10331	330Ω 5% 1W
3514	4822 051 10182	1k8 2% 0.25W
3515	4822 051 10228	2Ω2 5% 0.25W
3516	4822 100 10436	22k CARB LIN 0.1W
3517	4822 051 10228	2Ω2 5% 0.25W
3519	4822 051 10228	2Ω2 5% 0.25W
3520▲	4822 116 52283	4k7 5% 0.5W
3523	4822 051 10228	2Ω2 5% 0.25W
3529	4822 051 10228	2Ω2 5% 0.25W
3535	4822 051 10151	150Ω 2% 0.25W
3535	4822 051 51201	120Ω 1% 0.125W
3537	4822 116 52234	100Ω 5% 0.5W
3539	4822 053 20474	470k 5% 0.25W
3540	4822 051 51201	120Ω 1% 0.125W
3541	4822 116 52257	22k 5% 0.5W
3542	4822 051 10102	1k 2% 0.25W
3542	4822 051 10272	2k7 2% 0.25W
3543	4822 116 52175	100Ω 5% 0.5W
3545	4822 113 80576	180Ω 10% 5W
3545	4822 113 80668	330Ω 5% 5W
3546	4822 116 52206	120Ω 5% 0.5W
3546	4822 116 52213	180Ω 5% 0.5W
3548	4822 116 52175	100Ω 5% 0.5W
3549	4822 050 21203	12k 1% 0.6W
3550	4822 050 21203	12k 1% 0.6W
3551▲	4822 050 25601	560Ω 1% 0.6W
3552▲	4822 050 25601	560Ω 1% 0.6W
3553▲	4822 052 10561	560Ω 5% 0.33W
3560	4822 116 52244	15k 5% 0.5W
3560	4822 116 52271	33k 5% 0.5W
3561	4822 051 10332	3k3 2% 0.25W
3561	4822 051 20222	2k2 5% 0.1W
3570▲	4822 052 10688	6Ω8 5% 0.33W
3588▲	4822 052 10271	270Ω 5% 0.33W
3589▲	4822 052 10271	270Ω 5% 0.33W
3590▲	4822 116 52272	330k 5% 0.5W
3591	4822 051 10682	6k8 2% 0.25W
3592	4822 051 10681	680Ω 2% 0.25W
3604▲	4822 113 80593	1.5Ω 10% 5W
3606▲	4822 052 10102	1k 5% 0.33W
3610▲	4822 052 10688	6Ω8 5% 0.33W
3610▲	4822 052 10828	8Ω2 5% 0.33W
3616▲	4822 050 24708	4Ω7 1% 0.6W
3617	4822 116 52213	180Ω 5% 0.5W
3619	4822 116 52182	15Ω 5% 0.5W
3620	4822 053 12121	120Ω 5% 3W
3621▲	4822 053 12279	27Ω 5% 3W
3621	4822 053 12479	47Ω 5% 3W
3622	4822 053 12479	47Ω 5% 3W
3626	4822 113 80565	180Ω 5% 5W
3631	4822 050 21204	120k 1% 0.6W
3631	4822 050 22204	220k 1% 0.6W
3634	4822 051 10272	2k7 2% 0.25W
3634	4822 051 10332	3k3 2% 0.25W
3635	4822 101 11187	1k 30% LIN 0.1W
3637	4822 116 52175	100Ω 5% 0.5W
3659	4822 051 10181	180Ω 2% 0.25W
3675	4822 116 52239	120k 5% 0.5W
3675	4822 116 52284	47k 5% 0.5W
3677	4822 051 10108	1Ω 5% 0.25W
3678▲	4822 116 52283	4k7 5% 0.5W
3682▲	4822 053 10561	560Ω 5% 1W
3700	4822 116 52257	22k 5% 0.5W
3706▲	4822 051 10103	10k 2% 0.25W
3707	4822 051 10101	100Ω 2% 0.25W
3708▲	4822 051 10103	10k 2% 0.25W
3708	4822 051 10223	22k 2% 0.25W
3709▲	4822 116 52283	4k7 5% 0.5W
3710	4822 051 10104	100k 2% 0.25W
3718▲	4822 116 52215	220Ω 5% 0.5W
3719▲	4822 116 52215	220Ω 5% 0.5W
3721▲	4822 051 10103	10k 2% 0.25W
3722▲	4822 051 10103	10k 2% 0.25W
3724▲	4822 051 10103	10k 2% 0.25W
3725▲	4822 051 10103	10k 2% 0.25W
3727▲	4822 116 52217	270Ω 5% 0.5W
3728	4822 116 52175	100Ω 5% 0.5W
3729	4822 051 10911	910Ω 2% 0.25W
3730	4822 051 10221	220Ω 2% 0.25W
3732	4822 053 11103	10k 5% 2W
3732	4822 053 11332	3k3 5% 2W
3733	4822 050 23902	3k9 1% 0.6W
3734	4822 050 23902	3k9 1% 0.6W
3734▲	4822 116 52283	4k7 5% 0.5W
3736	4822 116 52175	100Ω 5% 0.5W
3737	4822 050 11002	1k 1% 0.4W
3741	4822 051 10123	12k 2% 0.25W
3742	4822 051 20222	2k2 5% 0.1W
3743▲	4822 051 10472	4k7 2% 0.25W
3746	4822 051 10123	12k 2% 0.25W
3747	4822 051 10822	8k2 2% 0.25W
3748	4822 051 10273	27k 2% 0.25W
3750▲	4822 051 10472	4k7 2% 0.25W
3751	4822 051 10153	15k 2% 0.25W
3752	4822 116 52244	15k 5% 0.5W
3753▲	4822 116 52283	4k7 5% 0.5W
3754	4822 051 10563	56k 2% 0.25W
3755	4822 051 10101	100Ω 2% 0.25W
3756	4822 051 10101	100Ω 2% 0.25W
3757	4822 051 10182	1k8 2% 0.25W
3758	4822 051 10182	1k8 2% 0.25W
3759▲	4822 051 10103	10k 2% 0.25W
3766	4822 116 52243	1k5 5% 0.5W
3767	4822 116 52243	1k5 5% 0.5W
3768	4822 051 10105	1M 5% 0.25W
3769	4822 116 52243	1k5 5% 0.5W
3770	4822 051 10473	47k 2% 0.25W
3771	4822 116 52251	18k 5% 0.5W
3772	4822 116 52276	3k9 5% 0.5W
3775	4822 051 10101	100Ω 2% 0.25W
3776	4822 051 10562	5k6 2% 0.25W
3779▲	4822 116 52233	10k 5% 0.5W
3780▲	4822 051 10103	10k 2% 0.25W
3781▲	4822 051 10472	4k7 2% 0.25W
3791	4822 051 10122	1k2 2% 0.25W
3792	4822 051 10122	1k2 2% 0.25W
3793	4822 051 10122	1k2 2% 0.25W
3794▲	4822 116 52215	220Ω 5% 0.5W
3850	4822 116 52201	75Ω 5% 0.5W
3851▲	4822 116 83953	75Ω 5% 0.125W
3852▲	4822 116 83953	75Ω 5% 0.125W
3853▲	4822 116 83953	75Ω 5% 0.125W
3854▲	4822 116 83953	75Ω 5% 0.125W
3855	4822 116 52201	75Ω 5% 0.5W
3856	4822 116 52175	100Ω 5% 0.5W
3860	4822 116 80176	1Ω 5% 0.5W
3861	4822 051 10159	15Ω 2% 0.25W
3862	4822 116 52218	300Ω 5% 0.5W
3863	4822 051 10223	22k 2% 0.25W
3864	4822 051 20222	2k2 5% 0.1W
3865	4822 116 52284	47k 5% 0.5W
3866	4822 051 10333	33k 2% 0.25W
3867▲	4822 116 52283	4k7 5% 0.5W
3868	4822 051 10394	390k 2% 0.25W
3872	4822 051 10102	1k 2% 0.25W
3886▲	4822 051 10472	4k7 2% 0.25W
3887	4822 050 11002	1k 1% 0.4W
3888	4822 116 52289	5k6 5% 0.5W
3890▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

5001	4822 156 20966	47μH 10%
5240	4822 157 53066	15μH 10%
5242	4822 157 53066	15μH 10%
5301	4822 157 63075	7.95 μH 8%
5303	4822 157 70827	33μH -5%
5534▲	4822 157 62771	Coil 90°
5534▲	4822 158 10728	Coil 110°
5541▲	4822 157 63078	Driver transformer
5545▲	4822 140 10499	LOT-21"-90°
5545▲	4822 140 10501	LOT 25"/28" BLS
5549▲	4822 157 53069	Balance coil
5554▲	4822 156 50097	Linearity coil LC90
5554▲	4822 157 63079	Linearity coil AT4042
5563▲	4822 157 51462	10μH
5582	4822 157 70826	2.4μH
5588▲	4822 157 53252	Coil
5606▲	4822 157 53995	100μH 10%
5619	4822 156 21125	3.9μH 10%
5619	4822 157 53139	4.7μH
5625▲	4822 146 31062	SOPS transformer
5630	4822 157 70826	2.4μH
5631	4822 158 10551	27μH
5632	4822 157 53066	15μH 10%
5675	4822 157 70826	2.4μH
5701	4822 157 53253	27μH 5%
5703	4822 156 20915	33μH

6204▲	4822 130 30621	1N4148
6245	4822 130 80446	LL4148
6246	4822 130 81139	LLZ-C3V3
6247	4822 130 81139	LLZ-C3V3
6248	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6302	4822 130 82192	LLZ-C8V2
6303	4822 130 34382	BZX79-C8V2
6310	4822 130 80884	LLZ-C5V1
6314	4822 130 80446	LL4148
6315▲	4822 130 30621	1N4148
6317	4822 130 80446	LL4148
6319	4822 130 34379	BZX79-C27
6320	4822 130 80877	BAV103
6322▲	4822 130 30621	1N4148
6332	4822 130 82583	LLZ-C9V1
6367	4822 130 80954	LLZ-C5V6
6464	4822 130 81015	LLZ-C10
6483▲	4822 130 30621	1N4148
6503	4822 130 42488	BYD33D
6504	4822 130 80446	LL4148
6505	4822 130 80446	LL4148
6542	4822 130 81222	LLZ-C15
6542	4822 130 82345	LLZ-C22
6546▲	4822 130 83342	BY228
6547▲	4822 130 41602	BYW95C/20
6549▲	4822 130 31983	BAT85
6551	4822 130 42489	BYD33G
6560	4822 130 80446	LL4148
6561	4822 130 30864	BZX79-C68
6563▲	4822 130 80915	BYD74C
6570	4822 130 42489	BYD33G
6571	4822 130 42488	BYD33D
6580	4822 130 80791	BYV28-200/20
6585	4822 130 42489	BYD33G
6590	4822 130 80881	LLZ-C33
6591▲	4822 130 30621	1N4148
6592	4822 130 81144	LLZ-C30
6592	4822 130 82346	LLZ-C27
6610	4822 130 80446	LL4148
6611▲	5322 130 80442	BZV85-C16
6612	4822 130 42488	BYD33D
6615	4822 130 80446	LL4148
6617	4822 130 31456	BZV85-C5V1
6621	4822 130 42488	BYD33D
6622▲	4822 130 30621	1N4148
6624▲	4822 130 31933	1N5061
6625▲	4822 130 31933	1N5061
6630▲	4822 130 33531	BY229F-600
6630▲	4822 130 81175	BYD74G
6640	4822 130 80914	BYD74B
6641	4822 130 80914	BYD74B
6661	4822 130 42488	BYD33D
6666	4822 130 34329	BZX79-C43
6666	4822 130 34368	BZX79-C36
6675	4822 130 80914	BYD74B
6704	4822 130 80446	LL4148
6705	4822 130 80905	LLZ-F5V1
6708	4822 130 81145	LLZ-F2V4
6709	4822 130 34142	BZX79-B33
6860	4822 130 82334	BAS85
6861▲	4822 130 30621	1N4148
6862	4822 130 80446	LL4148

7003	4822 130 42133	BC817
7200	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	5322 130 42136	BC848C
7240	4822 209 73853	TDA1521/N4
7243	4822 130 42513	BC858C
7244	4822 130 42513	BC858C
7248	5322 130 42136	BC848C
7249	5322 130 42136	BC848C
7301	5322 130 42136	BC848C
7302	4822 130 42513	BC858C
7303	4822 130 40855	BC337
7304	5322 130 42718	BFS20
7305	4822 209 30389	TDA4510/V8
7306	4822 209 33671	TDA4657/V2
7307	4822 209 12635	TDA4665/V3
7308	4822 209 32593	TDA4671/V1
7309	4822 209 33725	TDA4780/V2
7310	5322 130 42136	BC848C
7311	5322 130 42136	BC848C
7312	5322 130 42136	BC848C
7370	5322 130 42136	BC848C
7454	5322 130 41983	BC858B
7455	4822 130 60136	BC856
7456	5322 130 60159	BC846B
7470	4822 209 63423	TDA2579B/N2
7471	5322 130 42136	BC848C
7500▲	4822 130 41344	BC337-40
7502	4822 130 60775	2SD1266P
7503	4822 130 63508	BD536FI
7504▲	4822 130 41344	BC337-40
7505	4822 130 41327	BC327-40
7540▲	4822 130 41344	BC337-40
7545▲	4822 130 61265	BU508AF
7546▲	5322 130 41982	BC848B
7591	5322 130 41983	BC858B
7625▲	4822 130 62735	BUT12AF
7700▲	5322 130 41982	BC848B
7703▲	5322 130 41982	BC848B
7704▲	5322 130 41982	BC848B
7706▲	5322 130 41982	BC848B
7707▲	5322 130 41982	BC848B
7708	4822 209 52642	VERSION-1.2 EUROPA
7708	4822 209 52643	VERSION-1.2-EAST
7710	4822 209 32283	ST24C08B
7850	5322 130 42136	BC848C
7860	5322 130 42136	BC848C
7861	5322 130 42136	BC848C
7886	5322 130 42136	BC848C

1060 Seperate control module [A/B]

Various

	4822 267 40696	3P male vert white
	4822 265 31135	5P male vert black
	4822 267 50621	7P male vert white
	4822 256 92101	Bracket sep control module
	4822 267 31014	Jackplug stereo
	4822 276 30422	Switch 3-fold
1060	4822 212 31627	Seperate control module

2200	4822 122 31211	100pF 10% 500V
2203	4822 122 31211	100pF 10% 500V
2233	4822 121 41856	22nF 5% 250V
2234	4822 121 41856	22nF 5% 250V
2240	5322 122 32175	270pF 10% 100V

3200▲	4822 050 21002	1k 1% 0.6W
3202▲	4822 050 21002	1k 1% 0.6W
3246	4822 116 52176	10Ω 5% 0.5W
3247	4822 116 52224	470Ω 5% 0.5W
3248	4822 116 52176	10Ω 5% 0.5W
3249	4822 116 52224	470Ω 5% 0.5W
3775	4822 116 52175	100Ω 5% 0.5W
3776	4822 116 52289	5k6 5% 0.5W
3779▲	4822 116 52233	10k 5% 0.5W
3851	4822 116 80176	1Ω 5% 0.5W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

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6200	4822 130 31981	BZX79-F3V9
6201	4822 130 31981	BZX79-F3V9
6202	4822 130 31981	BZX79-F3V9
6203	4822 130 31981	BZX79-F3V9

1002 Mains filter module [D]

Various

	4822 265 30389	2P male vert yellow
	4822 265 30877	3P male vertB
	4822 267 40794	3P female vert grey WTB
	4822 290 40288	Snap connector
	4822 404 31317	Mains filter module bracket
1002	4822 212 30975	Mains filter module

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2602	4822 126 11141	2.2nF 10% 1K
2604	4822 126 11141	2.2nF 10% 1K

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3601	4822 116 40211	P.T.C.
3603	4822 117 10492	10M 5%
3605	4822 052 10102	1k 5% 0.33
3607	4822 050 23901	390Ω 1% 0.6
3608	4822 116 21213	VDR 1mA/275V

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5600	4822 157 63073	Mains filter
5605	4822 157 53995	100µH 10%

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6602	4822 130 31933	1N5061
6603	4822 130 31933	1N5061
6604	4822 130 31933	1N5061
6605	4822 130 31933	1N5061
6609	4822 130 34281	BZX79-F15
6610	4822 130 34281	BZX79-F15

1005 Picture tube (CRT) module [E]

Various

	4822 265 31133	3P male white
	4822 265 30378	4P male grey
	4822 265 50824	4P female grey
	4822 290 40283	5P male grey
	4822 290 40287	5P female green
	4822 290 40295	7P male grey
	4822 267 51275	7P female white
	4822 265 40252	7P female grey
	4822 267 51033	Single connector
	4822 492 70871	Spring
	4822 256 91879	Holder
▲	4822 255 70261	CRT-socket
1005	4822 212 31629	CRT module 90° narrow neck
1005	4822 212 31628	CRT module 110° BL-S

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2301	4822 122 31769	18pF 2% 63V
2301	4822 126 10324	33pF 2% 63V
2331	4822 122 31769	18pF 2% 63V
2331	4822 126 10324	33pF 2% 63V
2344▲	4822 124 40246	4.7µF 20% 63V
2361	4822 122 31825	27pF 2% 63V
2361	4822 122 32504	15pF 2% 63V
2391	4822 121 43878	27pF 2% 500V
2392	4822 124 80213	4.7µF 20% 100V
2393	4822 122 32542	47nF 10% 63V
2411▲	4822 124 80067	4.7µF 20% 63V
2421	4822 122 32482	22pF 2% 63V
2431	4822 121 41689	100nF 10% 250V
2432	5322 124 41378	33µF 20% 35V
2433▲	4822 126 12274	1500pF 10%R(HR) 2KV
2434	5322 122 32334	220pF 10% 100V
2520	5322 124 41299	68µF 20% 25V
2521	4822 122 32891	68nF 10% 63V
2522	5322 121 42661	330nF 5% 63V
2523	4822 122 31981	33nF +-0.5pF 50V
2526	4822 121 51093	6.8nF 5% 250V
2531	4822 121 42408	220nF 5% 63V
2531	4822 121 43396	120nF 5% 63V
2532	4822 124 80066	1µF 20% 63V
2532▲	4822 124 80067	4.7µF 20% 63V
2533	4822 124 40242	1µF 20% 63V
2534	5322 122 31647	1nF 10% 63V

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3301	4822 051 10131	130Ω 2% 0.25W
3302	4822 051 10182	1k8 2% 0.25W
3302	4822 051 10362	3k6 2% 0.25W
3303▲	4822 051 10242	2k4 2% 0.25W
3303	4822 051 10272	2k7 2% 0.25W
3304	4822 116 52239	120k 5% 0.5W
3305	4822 051 10154	150k 2% 0.25W
3305	4822 051 10823	82k 2% 0.25W
3306▲	4822 116 52219	330Ω 5% 0.5W
3309	4822 051 10108	1Ω 5% 0.25W
3309	4822 051 10479	47Ω 2% 0.25W
3310▲	4822 116 52219	330Ω 5% 0.5W
3311▲	4822 053 12153	15k 5% 3W
3312▲	4822 052 10271	270Ω 5% 0.33W
3313▲	4822 052 10271	270Ω 5% 0.33W
3314	4822 050 21502	1k5 1% 0.6W
3315	4822 051 10184	180k 2% 0.25W
3315	4822 051 10823	82k 2% 0.25W
3316	4822 051 10224	220k 2% 0.25W
3316	4822 051 10823	82k 2% 0.25W
3331	4822 051 10131	130Ω 2% 0.25W
3332	4822 051 10182	1k8 2% 0.25W
3332	4822 051 10362	3k6 2% 0.25W
3333	4822 116 52259	2k4 5% 0.5W
3333▲	4822 116 52263	2k7 5% 0.5W
3334	4822 116 52239	120k 5% 0.5W
3338	4822 051 10108	1Ω 5% 0.25W
3338	4822 051 10479	47Ω 2% 0.25W
3340▲	4822 116 52219	330Ω 5% 0.5W
3341▲	4822 053 12153	15k 5% 3W
3342▲	4822 052 10271	270Ω 5% 0.33W
3343▲	4822 052 10271	270Ω 5% 0.33W
3344	4822 050 21502	1k5 1% 0.6W
3345	4822 051 10681	680Ω 2% 0.25W
3361	4822 116 52208	130Ω 5% 0.5W
3362	4822 051 10182	1k8 2% 0.25W
3362	4822 051 10362	3k6 2% 0.25W
3364▲	4822 051 10472	4k7 2% 0.25W
3368	4822 051 10108	1Ω 5% 0.25W
3368	4822 051 10479	47Ω 2% 0.25W
3370▲	4822 116 52219	330Ω 5% 0.5W
3371▲	4822 053 12153	15k 5% 3W
3372▲	4822 052 10271	270Ω 5% 0.33W
3373▲	4822 052 10271	270Ω 5% 0.33W
3374	4822 050 21502	1k5 1% 0.6W
3375	4822 051 10184	180k 2% 0.25W
3375	4822 051 10823	82k 2% 0.25W
3376	4822 051 10224	220k 2% 0.25W
3376	4822 051 10823	82k 2% 0.25W
3382	4822 051 10102	1k 2% 0.25W
3383	4822 116 52284	47k 5% 0.5W
3384	4822 116 52277	39k 5% 0.5W
3385	4822 051 10473	47k 2% 0.25W
3391	4822 116 52284	47k 5% 0.5W
3392	4822 051 10123	12k 2% 0.25W
3395	4822 051 10122	1k2 2% 0.25W
3396	4822 051 10104	100k 2% 0.25W
3398	4822 051 10008	0Ω 5% 0.25W
3411	4822 116 52222	390Ω 5% 0.5W
3413	4822 116 52222	390Ω 5% 0.5W
3414	4822 051 10439	43Ω 2% 0.25W
3415	4822 116 52222	390Ω 5% 0.5W
3421	4822 051 10154	150k 2% 0.25W
3424	4822 051 20222	2k2 5% 0.1W
3431▲	4822 052 10181	180Ω 5% 0.33W
3431▲	4822 052 10271	270Ω 5% 0.33W
3432▲	4822 052 10229	22Ω 5% 0.33W
3433▲	4822 052 10128	1Ω2 5% 0.33W
3433▲	4822 052 10188	1Ω8 5% 0.33W
3434	4822 050 21502	1k5 1% 0.6W
3435	4822 050 21502	1k5 1% 0.6W
3436	4822 053 20825	8M2 5% 0.25W
3442	4822 116 52239	120k 5% 0.5W
3443▲	4822 051 10242	2k4 2% 0.25W
3443	4822 051 10272	2k7 2% 0.25W
3446	4822 051 10683	68k 2% 0.25W
3447	4822 051 10102	1k 2% 0.25W
3448	4822 051 10008	0Ω 5% 0.25W
3455	4822 051 10102	1k 2% 0.25W
3456	4822 050 11002	1k 1% 0.4W
3457	4822 051 10244	240k 2% 0.25W
3512	4822 051 10228	2Ω2 5% 0.25W
3518	4822 051 10151	150Ω 2% 0.25W
3520	4822 116 52211	150Ω 5% 0.5W
3521	4822 101 20902	4k7 10% LIN 0.05W
3522	4822 051 10152	1k5 2% 0.25W
3524	4822 051 10683	68k 2% 0.25W
3525	4822 100 20169	10k 10% LIN 0.05W
3525	4822 100 20644	22k 10% LIN 0.05W
3526	4822 050 26803	68k 1% 0.6W
3526	4822 050 26804	680k 1% 0.6W
3527	4822 051 10274	270k 2% 0.25W
3528	4822 051 20222	2k2 5% 0.1W
3529	4822 051 10008	0Ω 5% 0.25W
3529	4822 051 10471	470Ω 2% 0.25W
3530	4822 051 10008	0Ω 5% 0.25W
3530	4822 051 10102	1k 2% 0.25W
3531	4822 051 10008	0Ω 5% 0.25W
3531	4822 051 10104	100k 2% 0.25W
3532▲	4822 051 10103	10k 2% 0.25W
3533	4822 116 52207	1k2 5% 0.5W
3533	4822 116 52303	8k2 5% 0.5W
3534▲	4822 052 10828	8Ω2 5% 0.33W
3535	4822 051 10008	0Ω 5% 0.25W
3535	4822 051 10474	470k 2% 0.25W
3571	4822 051 10273	27k 2% 0.25W
3572	4822 051 10153	15k 2% 0.25W
3575	4822 051 10182	1k8 2% 0.25W
3578	4822 116 52245	150k 5% 0.5W
3580▲	4822 051 10103	10k 2% 0.25W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5401	4822 156 20966	47µH
5401	4822 157 71295	100µH
5530	4822 152 20559	390µH 10%

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6301	4822 130 30842	BAV21
6302	4822 130 81015	LLZ-C10
6303	4822 130 80877	BAV103
6331	4822 130 80877	BAV103
6345	4822 130 82192	LLZ-C8V2
6361	4822 130 30842	BAV21
6383	4822 130 80446	LL4148
6411	4822 130 32831	BZX79-F3V0
6421▲	4822 130 30621	1N4148
6422	4822 130 81512	LLZ-C6V2
6423	4822 130 34382	BZX79-F8V2
6518	4822 130 80446	LL4148
6519	4822 130 80446	LL4148

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7302	4822 130 41773	BF869
7303▲	5322 130 41982	BC848B
7304	4822 130 41782	BF422
7305	4822 130 41646	BF423
7331	4822 130 41773	BF869
7333▲	5322 130 41982	BC848B
7334	4822 130 41782	BF422
7335	4822 130 41646	BF423
7345	5322 130 41983	BC858B
7361	4822 130 41773	BF869
7363▲	5322 130 41982	BC848B
7364	4822 130 41782	BF422
7365	4822 130 41646	BF423
7383	4822 130 41782	BF422
7391	4822 130 41646	BF423
7411	4822 130 40937	BC548B
7530	5322 130 60159	BC846B
7533	4822 130 63015	BD440
7534	4822 130 44283	BC636
7537▲	5322 130 41982	BC848B
7538▲	5322 130 41982	BC848B

1003 Euro module [F]

Various

	4822 267 30631	2P cinch female
	4822 267 50621	7P male white
▲	4822 267 50721	9P male white
▲	4822 267 60243	Euroconnector blue
	4822 256 91879	Holder
1003	4822 212 31624	Euro module (non teletext)
1003	4822 212 31625	Euro module (teletext)
1003	4822 212 31626	Euro module (3RD scart + teletext)
1816▲	4822 252 51169	Fuse 250 mA
1910	4822 242 73552	Crystal 13.875MHz

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2200	4822 121 51299	1nF 10% 50V
2201▲	4822 124 40433	47µF 20% 25V
2202	4822 121 51299	1nF 10% 50V
2203▲	4822 124 40433	47µF 20% 25V
2204	4822 122 31211	100pF 10% 500V
2205	4822 121 51252	470nF 5% 63V
2206	4822 122 31211	100pF 10% 500V
2207	4822 121 51252	470nF 5% 63V
2208	4822 121 51252	470nF 5% 63V
2209	4822 121 51252	470nF 5% 63V
2210	4822 121 51252	470nF 5% 63V
2211▲	4822 124 40433	47µF 20% 25V
2212▲	4822 124 40433	47µF 20% 25V
2213	4822 121 41857	10nF 5% 250V
2214	4822 121 41857	10nF 5% 250V
2215	5322 124 41431	22µF 20% 35V
2216	5322 124 41431	22µF 20% 35V
2217	4822 124 40198	470µF 20% 16V
2218	5322 124 41431	22µF 20% 35V
2219	5322 124 41431	22µF 20% 35V
2220	4822 122 31116	2.2nF 10% 500V
2221	4822 122 31116	2.2nF 10% 500V
2222	4822 122 31116	2.2nF 10% 500V
2223	4822 122 31116	2.2nF 10% 500V
2800	4822 124 41643	100µF 20% 16V
2805	4822 124 40198	470µF 20% 16V
2806	5322 124 41431	22µF 20% 35V
2807▲	4822 124 40246	4.7µF 20% 63V
2808▲	4822 124 40246	4.7µF 20% 63V
2810	4822 124 41643	100µF 20% 16V
2813▲	4822 124 40246	4.7µF 20% 63V
2814	4822 121 41856	22nF 5% 250V
2822	4822 126 13161	100nF 10% 25V
2825	4822 122 32139	12pF 2% 63V
2826	4822 122 32139	12pF 2% 63V
2830	5322 121 42386	100nF 5% 63V
2832	5322 122 32531	100pF 5% 50V
2833▲	4822 124 40196	220µF 20% 16V
2834	4822 126 12944	47nF 10% 50V
2835▲	4822 124 40246	4.7µF 20% 63V
2837	5322 122 32269	6.8pF 5% 50V
2838	4822 124 41643	100µF 20% 16V
2890	4822 126 13161	100nF 10% 25V
2900▲	4822 124 40246	4.7µF 20% 63V
2901▲	4822 124 40433	47µF 20% 25V
2908	4822 122 31211	100pF 10% 500V
2909	4822 122 31211	100pF 10% 500V
2910▲	4822 122 33177	10nF 20% 50V
2911	5322 126 10794	220pF 5% 63V
2912	5322 122 32481	15pF 5% 50V
2913	5322 122 32481	15pF 5% 50V
2914	4822 126 13161	100nF 10% 25V
2915	4822 126 13161	100nF 10% 25V
2916	5322 126 10794	220pF 5% 63V
2917▲	4822 122 33177	10nF 20% 50V
2918	5322 122 32452	47pF 5% 63V
2920	4822 126 13161	100nF 10% 25V
2925▲	4822 122 33177	10nF 20% 50V
2926	5322 124 41431	22µF 20% 35V
2927	4822 124 41643	100µF 20% 16V

-▭-

3200	4822 116 52211	150Ω 5% 0.5W
3201	4822 051 20563	56k 5% 0.1W
3202	4822 116 52211	150Ω 5% 0.5W
3203	4822 051 20563	56k 5% 0.1W
3204	4822 050 11002	1k 1% 0.4W
3205	4822 050 11002	1k 1% 0.4W
3206	4822 051 20334	330k 5% 0.1W
3207	4822 051 20334	330k 5% 0.1W
3208▲	4822 116 52272	330k 5% 0.5W
3209	4822 051 20334	330k 5% 0.1W
3210	4822 051 20333	33k 5% 0.1W
3211	4822 051 20332	3k3 5% 0.1W
3212	4822 051 20333	33k 5% 0.1W
3213	4822 051 20332	3k3 5% 0.1W
3214	4822 051 20563	56k 5% 0.1W
3215	4822 051 20563	56k 5% 0.1W
3216	4822 116 52201	75Ω 5% 0.5W
3217	4822 116 52201	75Ω 5% 0.5W
3218	4822 051 20153	15k 5% 0.1W
3220	4822 051 20153	15k 5% 0.1W
3222	4822 051 20562	5k6 5% 0.1W
3223	4822 051 20562	5k6 5% 0.1W
3224	4822 051 20562	5k6 5% 0.1W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

3225	4822 051 20562	5k6 5% 0.1W
3226	4822 051 20562	5k6 5% 0.1W
3227	4822 051 20562	5k6 5% 0.1W
3228	4822 051 20103	10k 5% 0.1W
3229	4822 051 20103	10k 5% 0.1W
3230	4822 051 20153	15k 5% 0.1W
3231	4822 051 20332	3k3 5% 0.1W
3232	4822 051 20153	15k 5% 0.1W
3233	4822 051 20332	3k3 5% 0.1W
3234	4822 116 52211	150Ω 5% 0.5W
3235	4822 116 52211	150Ω 5% 0.5W
3800▲	4822 116 83953	75Ω 5% 0.125W
3801	4822 050 11201	120Ω 1% 0.4W
3802	4822 051 20101	100Ω 5% 0.1W
3803	4822 051 10102	1k 2% 0.25W
3804	4822 051 20561	560Ω 5% 0.1W
3805	4822 050 11201	120Ω 1% 0.4W
3807	4822 051 10102	1k 2% 0.25W
3808▲	4822 116 83953	75Ω 5% 0.125W
3809	4822 116 80175	4k7 5% 0.5W
3810▲	4822 116 83953	75Ω 5% 0.125W
3811	4822 050 11201	120Ω 1% 0.4W
3812	4822 051 20104	100k 5% 0.1W
3813	4822 051 20104	100k 5% 0.1W
3814	4822 116 52296	6k8 5% 0.5W
3815	4822 050 11002	1k 1% 0.4W
3816	4822 116 52175	100Ω 5% 0.5W
3817	4822 051 10102	1k 2% 0.25W
3818▲	4822 116 52199	68Ω 5% 0.5W
3819	4822 116 80175	4k7 5% 0.5W
3820	4822 116 52175	100Ω 5% 0.5W
3821	4822 051 20101	100Ω 5% 0.1W
3822	4822 116 52195	47Ω 5% 0.5W
3823	4822 116 52175	100Ω 5% 0.5W
3824	4822 051 20221	220Ω 5% 0.1W
3825	4822 051 20222	2k2 5% 0.1W
3826▲	4822 052 10159	15Ω 5% 0.33W
3827	4822 116 52226	560Ω 5% 0.5W
3828	4822 116 52207	1k2 5% 0.5W
3830	4822 051 20561	560Ω 5% 0.1W
3831	4822 116 52296	6k8 5% 0.5W
3832	4822 117 11139	1k5 1% 0.1W
3833	4822 051 20101	100Ω 5% 0.1W
3834▲	4822 053 10221	220Ω 5% 1W
3835	4822 050 11002	1k 1% 0.4W
3836	4822 051 20392	3k9 5% 0.1W
3837	4822 051 20104	100k 5% 0.1W
3838	4822 051 20332	3k3 5% 0.1W
3839	4822 051 20331	330Ω 5% 0.1W
3840	4822 051 20471	470Ω 5% 0.1W
3841	4822 117 11139	1k5 1% 0.1W
3842	4822 116 52175	100Ω 5% 0.5W
3843	4822 051 20223	22k 5% 0.1W
3845	4822 051 20221	220Ω 5% 0.1W
3846▲	4822 116 52215	220Ω 5% 0.5W
3847	4822 116 52175	100Ω 5% 0.5W
3848	4822 051 20101	100Ω 5% 0.1W
3849▲	4822 051 20109	10Ω 5% 0.1W
3851	4822 051 20221	220Ω 5% 0.1W
3885	4822 050 11201	120Ω 1% 0.4W
3886	4822 050 11201	120Ω 1% 0.4W
3887	4822 050 11201	120Ω 1% 0.4W
3890▲	4822 051 20472	4k7 5% 0.1W
3891▲	4822 051 20472	4k7 5% 0.1W
3892▲	4822 051 20472	4k7 5% 0.1W
3893	4822 116 52253	2k 5% 0.5W
3895▲	4822 116 83953	75Ω 5% 0.125W
3896	4822 050 11201	120Ω 1% 0.4W
3897▲	4822 116 83953	75Ω 5% 0.125W
3898	4822 050 11201	120Ω 1% 0.4W
3899	4822 050 11201	120Ω 1% 0.4W
3900▲	4822 052 10279	27Ω 5% 0.33W
3901	4822 051 20271	270Ω 5% 0.1W
3903	4822 051 10102	1k 2% 0.25W
3903	4822 051 20222	2k2 5% 0.1W
3910	4822 051 20153	15k 5% 0.1W
3911	4822 051 10102	1k 2% 0.25W
3912	4822 051 20471	470Ω 5% 0.1W
3913	4822 051 20471	470Ω 5% 0.1W
3914▲	4822 116 52219	330Ω 5% 0.5W
3915	4822 051 20682	6k8 5% 0.1W
3918	4822 051 20221	220Ω 5% 0.1W
3919	4822 051 20221	220Ω 5% 0.1W
3920	4822 051 20473	47k 5% 0.1W
3921	4822 116 52175	100Ω 5% 0.5W
3922	4822 116 52195	47Ω 5% 0.5W
3923	4822 051 20101	100Ω 5% 0.1W
3924	4822 116 52195	47Ω 5% 0.5W
3925	4822 051 20473	47k 5% 0.1W
3926	4822 051 20223	22k 5% 0.1W
3927	4822 051 20333	33k 5% 0.1W
3928	4822 116 52276	3k9 5% 0.5W
3929	4822 051 10102	1k 2% 0.25W

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5830	4822 152 20677	10μH
5920	4822 157 53634	5.6μH 10%

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6201	4822 130 80446	LL4148
6206	4822 130 82921	LLZ-F3V9
6207	4822 130 82921	LLZ-F3V9
6208	4822 130 82921	LLZ-F3V9
6209	4822 130 82921	LLZ-F3V9
6800	4822 130 80446	LL4148
6805	4822 130 81015	LLZ-C10
6830	4822 130 80446	LL4148
6831	4822 130 80446	LL4148
6900	4822 130 81227	LLZ-F5V6
6920▲	4822 130 30621	1N4148
6921▲	4822 130 30621	1N4148
6922	4822 130 80446	LL4148
6923	4822 130 80446	LL4148

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7201	5322 209 10576	HEF4053BP
7202	5322 130 42136	BC848C
7203	5322 130 42136	BC848C
7204	5322 130 42136	BC848C
7205	5322 130 42136	BC848C
7800	5322 130 42136	BC848C
7802	5322 130 42136	BC848C
7805▲	4822 130 41344	BC337-40
7809	5322 130 42136	BC848C
7820	4822 209 31145	TEA6415B
7830	5322 130 42136	BC848C
7831	5322 130 42136	BC848C
7832	5322 130 42136	BC848C
7833	5322 130 42136	BC848C
7834	5322 130 42136	BC848C
7890	5322 209 10576	HEF4053BP
7892	4822 130 42513	BC858C
7893	4822 130 42513	BC858C
7894	4822 130 42513	BC858C
7900	4822 130 63558	BD533
7910	4822 209 52606	CF72306
7920	4822 209 52605	CF70200B
7921	5322 130 42136	BC848C
7922	5322 130 60159	BC846B

1007 SOPS controle module [G]

Various

	4822 265 31137	6P pinstrip BTB
	4822 265 31138	4P pinstrip BTB
1007	4822 212 31669	SOPS control module 90°
1007	4822 212 31715	SOPS control module 110°

⊣⊢

2611	4822 121 41299	68μF 20% 50V
2629	4822 122 31784	4.7nF 10% 50V
2636	4822 122 31644	2.2nF 10% 63V
2637	4822 122 31772	47pF 2% 63V
2646	4822 124 80465	15μF 10% 25V
2647	4822 122 31784	4.7nF 10% 50V
2649	4822 122 33496	100nF 10% 63V
2650	4822 122 33496	100nF 10% 63V
2651	4822 122 33496	100nF 10% 63V
2661▲	4822 124 40433	47μF 20% 25V
2662	4822 122 32142	270pF 2% 63V
2663	4822 122 31765	100pF 2% 63V *
2663	4822 122 31839	82pF 2% 63V
2664	4822 124 41379	2.2μF 20% 50V
2665	4822 122 32153	1.8nF 10% 63V
2670	5322 122 31766	120pF 2% 63V
2671	5322 121 42408	220nF 5% 63V
2674	4822 122 31644	2.2nF 10% 63V

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3623	4822 050 21604	160K 1% 0.6W
3624	4822 050 21604	160K 1% 0.6W
3625▲	4822 053 21564	560k 5% 0.5W
3628	4822 051 10334	330k 2% 0.25W
3629	4822 051 10682	6k8 2% 0.25W
3636	4822 051 10224	220K 2% 0.25W
3647	4822 050 23303	33K 1% 0.6W *
3647	4822 050 23603	36K 1% 0.6W
3648	4822 051 10273	27k 2% 0.25W
3649▲	4822 050 23309	330k 5% 0.5W
3658▲	4822 052 10688	6R8 5% 0.33W
3660	4822 051 10101	100Ω 2% 0.25W
3661	4822 051 10361	360Ω 2% 0.25W
3662	4822 051 10221	220Ω 2% 0.25W
3663	4822 051 10562	5k6 2% 0.25W
3664	4822 051 10272	2k7 2% 0.25W
3665▲	4822 051 10822	8k2 2% 0.25W *
3665▲	4822 051 10123	12k 2% 0.25W
3666	4822 051 10102	1k0 2% 0.25W
3667	4822 051 10361	360Ω 2% 0.25W
3670	4822 051 10303	30k0 2% 0.25W
3671	4822 051 10102	1k0 2% 0.25W
3672▲	4822 051 10103	10k0 2% 0.25W
3673	4822 051 54702	4k7 1% 0.125W *
3673	4822 051 54642	4k64 1% 0.125W
3674	4822 051 59101	910Ω 1% 0.125W *
3674	4822 051 51052	1K05 1% 0.125W
3676	4822 051 10682	6k8 2% 0.25W
3680	4822 051 10562	5k6 2% 0.25W *
3681	4822 051 10109	10Ω 2% 0.25W

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5661	4822 157 60449	10μH

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6646	4822 130 41488	BYD33D
6648	4822 130 34488	BZX79-F12
6648	4822 130 61219	BZX79-F10 *
6649	4822 130 80446	LL4148
6660	4822 130 30621	1N4148
6662	4822 130 80905	LLZ-F5V1
6663	4822 130 34281	BZX79-F15
6664	4822 130 31983	BAT85
6665	4822 130 80883	LLZ-C4V7
6669	4822 130 80446	LL4148
6670	4822 130 20272	EO102AA

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7600	5322 209 63735	TDA8385/N2
7614	5322 130 30992	CNR50
7661	5322 130 42631	BD533
7663	5322 130 42153	BC858C
7671	5322 130 61207	BC848C

* only for 90 degree module

1008 COMB filter [H]

Various

▲	4822 267 40624	5P male vert white
	4822 267 41114	5P female hor white
	4822 265 31137	6P pinstrip
1008	4822 212 30984	COMB filter module

⊣⊢

2309	4822 122 31971	10pF 2% 63V
2400	4822 124 80701	47μF 20% 6.3V
2401	4822 122 33342	33nF 10% 63V
2402	4822 124 80701	47μF 20% 6.3V
2403	4822 122 33342	33nF 10% 63V
2404	4822 124 80701	47μF 20% 6.3V
2405	4822 122 33342	33nF 10% 63V
2406	4822 124 80248	10μF 20% 16V
2407	4822 122 33342	33nF 10% 63V
2408	4822 124 80248	10μF 20% 16V
2409	4822 122 33342	33nF 10% 63V
2410	4822 124 80248	10μF 20% 16V
2411	4822 122 33342	33nF 10% 63V
2412	4822 122 33342	33nF 10% 63V
2413	4822 124 80248	10μF 20% 16V
2416	4822 122 33216	270pF 5% 50V
2417	4822 122 33342	33nF 10% 63V
2418	4822 124 80248	10μF 20% 16V
2419	4822 122 33342	33nF 10% 63V
2420▲	4822 122 33177	10nF 20% 50V
2421▲	4822 122 33177	10nF 20% 50V
2422	5322 122 32531	100pF 5% 50V
2423▲	4822 122 33177	10nF 20% 50V
2424	4822 122 33342	33nF 10% 63V
2425	5322 122 32452	47pF 5% 63V
2426	4822 122 33342	33nF 10% 63V
2430	4822 124 80248	10μF 20% 16V
2431	5322 122 32658	22pF 5% 50V
2432	4822 122 33342	33nF 10% 63V

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3402	4822 051 20103	10k 5% 0.1W
3403	4822 051 20101	100Ω 5% 0.1W
3404	4822 051 20301	300Ω 5% 0.1W
3406	4822 051 20105	1M 5% 0.1W
3407	4822 051 20103	10k 5% 0.1W
3410	4822 051 20103	10k 5% 0.1W
3411	4822 051 20222	2k2 5% 0.1W
3412	4822 051 20391	390Ω 5% 0.1W
3413	4822 051 20223	22k 5% 0.1W
3414	4822 051 20122	1k2 5% 0.1W
3416	4822 051 20681	680Ω 5% 0.1W
3418	4822 051 10102	1k 2% 0.25W
3419	4822 051 20181	180Ω 5% 0.1W
3420	4822 051 20473	47k 5% 0.1W
3421	4822 051 20473	47k 5% 0.1W
3422	4822 051 10102	1k 2% 0.25W
3423	4822 051 20471	470Ω 5% 0.1W
3424	4822 051 20151	150Ω 5% 0.1W
3425	4822 051 20471	470Ω 5% 0.1W
3426	4822 051 20122	1k2 5% 0.1W
3427	4822 051 20479	47Ω 5% 0.1W
3428	4822 051 20821	820Ω 5% 0.1W
3429	4822 051 20479	47Ω 5% 0.1W
3430	4822 051 20561	560Ω 5% 0.1W
3431	4822 051 20331	330Ω 5% 0.1W
3432	4822 051 20223	22k 5% 0.1W
3433	4822 051 20221	220Ω 5% 0.1W
3434	4822 051 20221	220Ω 5% 0.1W
3435	4822 051 10102	1k 2% 0.25W
3436	4822 051 20339	33Ω 5% 0.1W
3438	4822 051 20821	820Ω 5% 0.1W
3439	4822 051 20431	430Ω 5% 0.1W
3440	4822 051 20101	100Ω 5% 0.1W
3443	4822 051 20008	0Ω jumper
3444	4822 051 20008	0Ω jumper
3445	4822 051 20008	0Ω jumper
3446	4822 051 20681	680Ω 5% 0.1W
3447	4822 051 20162	1k6 5% 0.1W
3448	4822 051 20681	680Ω 5% 0.1W
3449	4822 051 20151	150Ω 5% 0.1W

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5400	4822 152 20677	10μH
5401	4822 152 20677	10μH
5402	4822 152 20677	10μH
5403	4822 157 63065	0.68μH
5404	4822 152 20677	10μH
5405	4822 152 20677	10μH

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6420	4822 130 80446	LL4148

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7400	4822 209 32587	MC141625A
7401	5322 130 42136	BC848C
7402	4822 130 61207	BC848
7403	4822 130 61207	BC848
7404	4822 130 61207	BC848
7405	5322 130 42012	BC858
7410	5322 130 42012	BC858
7411	4822 130 61207	BC848
7420	5322 130 42136	BC848C
7421	5322 130 42136	BC848C
7422	4822 130 42513	BC858C
7423	4822 130 42513	BC858C
7430	5322 209 14481	HEF4053BT

BTB = Board To Board; WTB = Wire To Board

1003 IF module [J/K/L/M]

Various

	4822 265 31059	5P red
1003	4822 212 31618	IF module Nicam PAL I
1003	4822 212 31619	IF module Stereo PAL BG
1003	4822 212 31621	IF module Nicam PAL BG
1003	4822 212 31622	IF module Stereo P/S BGLI
1003	4822 212 31623	IF module Stereo P/S BG/DK
1000	4822 242 80295	SAW 38.9 MHz Stereo PAL BG
1000	4822 242 81436	SAW 38.9 MHz Stereo P/S
1000	4822 242 81717	SAW 38.9 MHz NICAM PAL BG
1000	4822 242 81718	SAW 38.9 MHz NICAM PAL I
1001	4822 153 30025	6.0 MHz
1001	4822 242 72211	5.5 MHz
1100	4822 242 70714	5.5 MHz
1100	4822 242 71713	6.0 MHz
1101	4822 242 70485	5.74 MHz
1102	4822 242 70714	5.5 MHz
1102	4822 242 71713	6.0 MHz
1102	4822 242 72057	6.5 MHz
1103	4822 242 81423	38.9 MHz P/S BGLI
1103	4822 242 81716	38.9 MHz P/S BGDK
1104	4822 242 81715	33.4 MHz
1200	4822 242 81813	Crystal 10 MHz
1300	4822 242 81187	Crystal 11.700 MHz
1300	4822 242 81188	Crystal 13.104 MHz
1301	4822 242 81719	Crystal 8.192 MHz
1302	4822 242 72301	TH316BOM-20800 DAF
1302	4822 242 72303	TH316BQM

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2000	4822 126 13159	180pF 5% 50V
2001	4822 126 13162	56pF 5% 50V
2002	4822 126 13161	100nF 10% 25V
2003	4822 124 41576	2.2µF 20% 50V
2004	4822 122 32927	220nF 20% 50V
2004	4822 126 13061	220nF 20% 25V
2005▲	5322 126 10223	4.7nF 10% 63V
2007	5322 122 31866	6.8nF 10% 63V
2007▲	5322 126 10223	4.7nF 10% 63V
2008	4822 126 13161	100nF 10% 25V
2008	4822 126 13346	39nF 10% 50V
2009	4822 124 41576	2.2µF 20% 50V
2010▲	4822 124 40246	4.7µF 20% 63V
2010▲	4822 124 40433	47µF 20% 25V
2011	5322 122 32269	6.8pF 5% 50V
2011	5322 122 32286	3.3pF 5% 50V
2012▲	4822 122 33177	10nF 20% 50V
2013	4822 126 13161	100nF 10% 25V
2014	4822 122 33496	100nF 10% 63V
2015	4822 124 41643	100µF 20% 16V
2016▲	4822 122 33177	10nF 20% 50V
2017	4822 126 13161	100nF 10% 25V
2018	4822 122 32646	5.6nF 10% 50V
2018	4822 126 13161	100nF 10% 25V
2020	5322 122 33537	1.2pF 5% 63V
2021	5322 122 33063	2.2pF 5% 50V
2100	5322 124 41431	22µF 20% 35V
2101	5322 124 41431	22µF 20% 35V
2102▲	5322 126 10223	4.7nF 10% 63V
2103▲	5322 126 10223	4.7nF 10% 63V
2106▲	5322 126 10223	4.7nF 10% 63V
2107	4822 124 41576	2.2µF 20% 50V
2108▲	5322 126 10223	4.7nF 10% 63V
2200	4822 122 33219	1.8nF 10% 50V
2201	4822 051 10008	Jumper
2202▲	4822 122 33177	10nF 20% 50V
2203	4822 126 13161	100nF 10% 25V
2204	4822 126 13161	100nF 10% 25V
2205▲	4822 122 33342	33nF 10% 63V
2206	4822 122 32646	5.6nF 10% 50V
2207	4822 122 32646	5.6nF 10% 50V
2208▲	4822 122 33342	33nF 10% 63V
2209	4822 122 33128	15nF 10% 63V
2210	4822 122 33128	15nF 10% 63V
2211	4822 126 13161	100nF 10% 25V
2212	4822 126 13161	100nF 10% 25V
2214	4822 124 40248	10µF 20% 63V
2215▲	4822 124 40196	220µF 20% 16V
2216▲	4822 124 40246	4.7µF 20% 63V
2217	4822 124 41643	100µF 20% 16V
2218▲	4822 124 40433	47µF 20% 25V
2219▲	4822 124 40246	4.7µF 20% 63V
2220▲	4822 124 40196	220µF 20% 16V
2221▲	4822 124 40196	220µF 20% 16V
2222	5322 121 42498	680nF 5% 63V
2223	5322 121 42498	680nF 5% 63V
2224	4822 122 32927	220nF 20% 50V
2225	4822 122 32927	220nF 20% 50V
2226	4822 124 41643	100µF 20% 16V
2227	4822 124 41643	100µF 20% 16V
2228	4822 124 41643	100µF 20% 16V
2228	4822 124 80702	100µF 20% 25V
2229	4822 124 41643	100µF 20% 16V
2230	5322 124 41431	22µF 20% 35V
2231	5322 124 41431	22µF 20% 35V
2232	5322 122 34098	10nF 10% 63V
2233	5322 122 34098	10nF 10% 63V
2234	4822 122 32927	220nF 20% 50V
2235	4822 122 32927	220nF 20% 50V
2236	4822 122 32927	220nF 20% 50V
2237	5322 124 41431	22µF 20% 35V
2238	5322 124 41431	22µF 20% 35V
2300	4822 121 42408	220nF 5% 63V
2301	4822 126 13161	100nF 10% 25V
2302	4822 126 13161	100nF 10% 25V
2303	4822 122 33514	68pF 5% 50V
2304	5322 122 31863	330pF 5% 50V
2305	4822 126 13161	100nF 10% 25V
2306	5322 122 33538	150pF 2% 63V
2307	5322 122 33538	150pF 2% 63V
2308▲	5322 122 34123	1nF 10% 50V
2309	4822 126 13161	100nF 10% 25V
2310	5322 122 31863	330pF 5% 50V
2311	5322 122 31866	6.8nF 10% 63V
2312	5322 122 31863	330pF 5% 50V
2313▲	4822 124 40433	47µF 20% 25V
2318	5322 122 31863	330pF 5% 50V
2319	4822 122 33514	68pF 5% 50V
2320▲	4822 122 33172	390pF 5% 50V
2321▲	5322 122 34123	1nF 10% 50V
2322▲	4822 122 33177	10nF 20% 50V
2323▲	5322 122 32654	22nF 10% 63V
2324	5322 121 42661	330nF 5% 63V
2325▲	5322 122 34123	1nF 10% 50V
2328▲	4822 122 33177	10nF 20% 50V
2329	5322 122 32659	33pF 5% 50V
2330	5322 122 32659	33pF 5% 50V
2331	5322 122 32531	100pF 5% 50V
2332	5322 122 32531	100pF 5% 50V
2333▲	4822 122 33177	10nF 20% 50V
2334	4822 126 13161	100nF 10% 25V
2335	4822 126 13161	100nF 10% 25V
2336▲	4822 124 40433	47µF 20% 25V
2340▲	4822 122 33177	10nF 20% 50V
2343	4822 122 33219	1.8nF 10% 50V
2343▲	5322 122 32654	22nF 10% 63V
2344	4822 122 33219	1.8nF 10% 50V
2344▲	5322 122 32654	22nF 10% 63V
2347	4822 124 41643	100µF 20% 16V

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3000	4822 116 52211	150Ω 5% 0.5W
3001	4822 101 11192	22k 30% LIN 0.1W
3002	4822 051 20181	180Ω 5% 0.1W
3004	4822 116 52289	5k6 5% 0.5W
3011	4822 051 20223	22k 5% 0.1W
3011	4822 116 52257	22k 5% 0.5W
3012	4822 051 20223	22k 5% 0.1W
3013	4822 051 20101	100Ω 5% 0.1W
3013	4822 051 20151	150Ω 5% 0.1W
3013	4822 051 20181	180Ω 5% 0.1W
3013	4822 051 20271	270Ω 5% 0.1W
3013	4822 051 20391	390Ω 5% 0.1W
3014	4822 051 20123	12k 5% 0.1W
3015	4822 051 20223	22k 5% 0.1W
3016	4822 051 20562	5k6 5% 0.1W
3018	4822 051 20106	10M 5% 0.1W
3019	4822 051 20474	470k 5% 0.1W
3024	4822 051 20562	5k6 5% 0.1W
3026▲	4822 052 10109	10Ω 5% 0.33W
3027	4822 051 20122	1k2 5% 0.1W
3031	4822 051 20222	2k2 5% 0.1W
3033	4822 053 10688	6Ω8 5% 1W
3034	4822 051 20101	100Ω 5% 0.1W
3098	4822 051 20104	100k 5% 0.1W
3098	4822 051 20223	22k 5% 0.1W
3098	4822 051 20224	220k 5% 0.1W
3098	4822 051 20564	560k 5% 0.1W
3098	4822 051 20822	8k2 5% 0.1W
3100	4822 051 20561	560Ω 5% 0.1W
3101	4822 051 20561	560Ω 5% 0.1W
3102	4822 051 20561	560Ω 5% 0.1W
3103	4822 051 20222	2k2 5% 0.1W
3104	4822 051 20103	10k 5% 0.1W
3106	4822 116 52234	100Ω 5% 0.5W
3107	4822 116 52234	100Ω 5% 0.5W
3108	4822 051 20471	470Ω 5% 0.1W
3109	4822 051 20471	470Ω 5% 0.1W
3113	4822 116 52234	100Ω 5% 0.5W
3114	4822 051 20103	10k 5% 0.1W
3115	4822 051 20103	10k 5% 0.1W
3116	4822 051 20103	10k 5% 0.1W
3117	4822 051 20222	2k2 5% 0.1W
3200	4822 051 10102	1k 2% 0.25W
3207	4822 051 20822	8k2 5% 0.1W
3208▲	4822 052 10181	180Ω 5% 0.33W
3211	4822 051 20122	1k2 5% 0.1W
3212	4822 051 20223	22k 5% 0.1W
3212	4822 051 20473	47k 5% 0.1W
3214	4822 051 20222	2k2 5% 0.1W
3218	4822 051 20474	470k 5% 0.1W
3219	4822 051 20564	560k 5% 0.1W
3220	4822 051 20563	56k 5% 0.1W
3221	4822 051 20563	56k 5% 0.1W
3222	4822 051 20823	82k 5% 0.1W
3223	4822 051 20333	33k 5% 0.1W
3224	4822 051 20101	100Ω 5% 0.1W
3225	4822 051 20101	100Ω 5% 0.1W
3230	4822 051 20562	5k6 5% 0.1W
3231	4822 051 20332	3k3 5% 0.1W
3232	4822 051 10102	1k 2% 0.25W
3233	4822 051 10102	1k 2% 0.25W
3234	4822 051 20101	100Ω 5% 0.1W
3234▲	4822 052 10181	180Ω 5% 0.33W
3235	4822 051 20101	100Ω 5% 0.1W
3237	4822 051 20823	82k 5% 0.1W
3238	4822 051 20333	33k 5% 0.1W
3240	4822 051 20101	100Ω 5% 0.1W
3241	4822 051 20101	100Ω 5% 0.1W
3300	4822 051 20563	56k 5% 0.1W
3301▲	4822 051 20109	10Ω 5% 0.1W
3302	4822 051 20228	2Ω2 5% 0.1W
3303	4822 051 20392	3k9 5% 0.1W
3304	4822 051 20223	22k 5% 0.1W
3305	4822 051 20223	22k 5% 0.1W
3306	4822 051 20104	100k 5% 0.1W
3307	4822 051 20159	15Ω 5% 0.1W
3308	4822 051 20224	220k 5% 0.1W
3309	4822 051 20823	82k 5% 0.1W
3314	4822 051 20471	470Ω 5% 0.1W
3315	4822 051 20563	56k 5% 0.1W
3316	4822 051 10102	1k 2% 0.25W
3317	4822 051 20105	1M 5% 0.1W
3318	4822 051 20223	22k 5% 0.1W
3319	4822 117 11139	1k5 1% 0.1W
3320	4822 051 20103	10k 5% 0.1W
3321	4822 051 20104	100k 5% 0.1W
3322	4822 051 20273	27k 5% 0.1W
3323	4822 051 20104	100k 5% 0.1W
3324	4822 051 20103	10k 5% 0.1W
3326	4822 051 20681	680Ω 5% 0.1W
3327	4822 051 20182	1k8 5% 0.1W
3328	4822 117 11139	1k5 1% 0.1W
3329	4822 051 20331	330Ω 5% 0.1W
3331	4822 051 20332	3k3 5% 0.1W
3332	4822 051 20332	3k3 5% 0.1W
3333	4822 116 52224	470Ω 5% 0.5W
3334	4822 051 20122	1k2 5% 0.1W
3335	4822 051 20471	470Ω 5% 0.1W
3336	4822 051 20101	100Ω 5% 0.1W
3337	4822 051 20101	100Ω 5% 0.1W
3340	4822 051 20122	1k2 5% 0.1W
3341	4822 051 20471	470Ω 5% 0.1W
4xxx	4822 051 10008	0Ω 5% 0.25W

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5000	4822 157 61898	0.47µH 10%
5001	4822 157 71099	0.28µH 10%
5002	4822 157 53066	15µH 10%
5002	4822 157 53303	12µH 10%
5002	4822 157 53634	5.6µH 10%
5002	4822 157 62767	8.2µH
5004	4822 157 53302	1µH
5004	4822 157 53539	0.27µH 5%
5100	4822 157 71098	1.8µH
5201	4822 157 71296	1500µH
5300	4822 157 50975	1 mH
5301	4822 157 50975	1 mH

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6003	4822 130 80446	LL4148
6007	4822 130 80954	LLZ-C5V6
6007	4822 130 81227	LLZ-F5V6
6100	4822 130 80888	BA682
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6200	4822 130 80446	LL4148
6201	4822 130 80446	LL4148
6202	4822 130 82192	LLZ-C8V2
6203	4822 130 80446	LL4148
6204	4822 130 80446	LL4148
6205	4822 130 82192	LLZ-C8V2
6206	4822 130 80446	LL4148
6207	4822 130 80446	LL4148
6208	4822 130 80446	LL4148
6209	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6301	5322 130 34689	BBY31
6302	5322 130 80119	BBY40

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7001	5322 209 10576	HEF4053BP
7004	4822 209 33707	TDA9815/V2
7005	5322 130 42136	BC848C
7008	4822 130 44121	BC338
7102	5322 130 42136	BC848C
7103	5322 130 42136	BC848C
7104	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7202	4822 130 42513	BC858C
7203	5322 130 42136	BC848C
7204	4822 209 33706	TDA9861/V1
7205	4822 209 32863	TDA9840/V2
7206	5322 130 42136	BC848C
7207	5322 130 42136	BC848C
7208	5322 130 42136	BC848C
7209	4822 130 42513	BC858C
7302	5322 130 42136	BC848C
7303	5322 130 42136	BC848C
7304	4822 209 30909	TDA8732/C1
7305	4822 209 32959	SAA7282AZP
7306	5322 130 42136	BC848C
7307	5322 130 42136	BC848C

1006 Third scart module [N]

Various

	4822 265 31214	3P male black
▲	4822 267 50721	9P male white
	4822 267 51276	9P female white
	4822 267 60366	Euroconnector
1006	4822 212 31631	Third scart module

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2950	4822 124 41643	100µF 20% 16V
2951	4822 122 31116	2.2nF 10% 500V
2952	4822 122 31116	2.2nF 10% 500V
2953	4822 122 31211	100pF 10% 500V
2954	4822 122 31211	100pF 10% 500V
2955	4822 121 51252	470nF 5% 63V
2956	4822 121 51252	470nF 5% 63V
2957	4822 121 51252	470nF 5% 63V
2958	4822 121 51252	470nF 5% 63V
2959	4822 121 51252	470nF 5% 63V
2960	4822 122 32927	220nF 20% 50V
2961	4822 122 32927	220nF 20% 50V
2962	4822 122 32927	220nF 20% 50V
2963	4822 122 32927	220nF 20% 50V
2964	4822 122 31116	2.2nF 10% 500V
2965	4822 122 31116	2.2nF 10% 500V
2975	4822 124 41643	100µF 20% 16V
2978▲	4822 124 40246	4.7µF 20% 63V
2980	4822 126 13161	100nF 10% 25V
2981	4822 121 41856	22nF 5% 250V

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3951	4822 116 52211	150Ω 5% 0.5W
3952	4822 116 52211	150Ω 5% 0.5W
3953▲	4822 116 52269	3k3 5% 0.5W
3954▲	4822 116 52269	3k3 5% 0.5W
3955	4822 051 20334	330k 5% 0.1W
3956	4822 051 20334	330k 5% 0.1W
3957	4822 051 20334	330k 5% 0.1W
3958	4822 051 20334	330k 5% 0.1W
3959	4822 051 20332	3k3 5% 0.1W
3960	4822 051 20332	3k3 5% 0.1W
3961	4822 051 20683	68k 5% 0.1W
3962	4822 051 20683	68k 5% 0.1W
3963	4822 051 20104	100k 5% 0.1W
3964	4822 051 20332	3k3 5% 0.1W
3965	4822 051 20104	100k 5% 0.1W

BTB = Board To Board; WTB = Wire To Board

Spare parts list / Stükliste / Liste des pièces

3966	4822 051 20332	3k3 5% 0.1W
3967	4822 051 20104	100k 5% 0.1W
3968	4822 051 20104	100k 5% 0.1W
3969	4822 051 20683	68k 5% 0.1W
3970	4822 051 20683	68k 5% 0.1W
3971	4822 051 20153	15k 5% 0.1W
3972▲	4822 116 52233	10k 5% 0.5W
3973	4822 051 20222	2k2 5% 0.1W
3974	4822 116 80173	10k 5% 0.5W
3975	4822 116 52201	75Ω 5% 0.5W
3976	4822 050 11002	1k 1% 0.4W
3977	4822 116 52175	100Ω 5% 0.5W
3978	4822 116 52201	75Ω 5% 0.5W
3979	4822 116 52175	100Ω 5% 0.5W
3980	4822 051 20221	220Ω 5% 0.1W
3981	4822 051 20471	470Ω 5% 0.1W
3982	4822 051 20101	100Ω 5% 0.1W
3983	4822 051 20471	470Ω 5% 0.1W
3985▲	4822 116 52256	2k2 5% 0.5W
3986	4822 116 52296	6k8 5% 0.5W
3987	4822 116 80175	4k7 5% 0.5W
3988	4822 051 20182	1k8 5% 0.1W
3989	4822 051 20182	1k8 5% 0.1W
3990	4822 116 52175	100Ω 5% 0.5W
3991	4822 116 52211	150Ω 5% 0.5W
3992	4822 116 52211	150Ω 5% 0.5W

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5950	4822 157 53634	5.6μH 10%

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6950	4822 130 80446	LL4148

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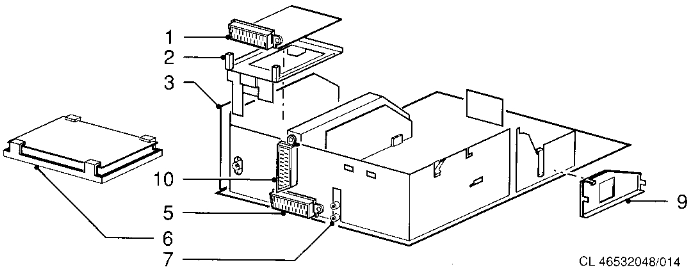
7950	5322 209 10576	HEF4053BP
7951	5322 130 42136	BC848C
7952	5322 130 42136	BC848C
7953	5322 130 42136	BC848C
7954	5322 130 42136	BC848C
7975	5322 130 42136	BC848C
7976	5322 130 42136	BC848C
7977	4822 130 42513	BC858C
7978	4822 130 42513	BC858C
7979	5322 130 42136	BC848C



CL 46532048/014
270694

Mechanical parts list

1	4822 267 60366	Third scart euroconnector
2	4822 404 31322	3rd scart holder
3	Not applicable	
5	4822 267 60243	Euroconnector
6	4822 403 70926	Sep. mains holder
7	4822 267 30631	2 Fold cinch
9	4822 404 31317	Mains filter bracket
10	4822 267 60243	Euroconnector

BTB = Board To Board; WTB = Wire To Board